

## **DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 2006**

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**WEDNESDAY, APRIL 6, 2005**

**U.S. SENATE,  
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,  
*Washington, DC.***

The subcommittee met at 9:30 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Domenici, Inouye, Leahy, and Dorgan.

**DEPARTMENT OF DEFENSE  
DEPARTMENT OF THE AIR FORCE  
OFFICE OF THE SECRETARY**

**STATEMENTS OF:**

**HON. MICHAEL L. DOMINGUEZ, ACTING SECRETARY OF THE AIR  
FORCE  
GENERAL JOHN P. JUMPER, CHIEF OF STAFF**

**OPENING STATEMENT OF SENATOR TED STEVENS**

Senator STEVENS. Good morning, Mr. Secretary and General Jumper. It's good to see you before our subcommittee at this time.

It's great—a matter of great importance. I'm sorry to say that there are problems about votes and schedules that have been changed due to the joint session of Congress. We do thank you each for your dedicated service to our Nation and to the people that serve with you in the Air Force. We remain committed to do as much as we can to assist you in your jobs, and we know you're confronted with a very difficult task in modernizing the Air Force and meeting the challenges that we have in Afghanistan and Iraq.

We have begun our review of the 2006 Defense budget. And from your budget request and from your posture statement, we understand the Air Force is placing priority on modernization through the continued investments in the F/A-22, the C-17, and the F-35. We also note a significant commitment to the next generation of space platforms, and look forward to hearing your statements and priorities today.

Senator Inouye will be along momentarily. He's asked us to proceed. Your full statements are already part of the record. We appreciate your having provided them, according to our rules, and would like to have you make your remarks at this time.

Mr. Secretary.

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Mr. DOMINGUEZ. Thank you, Mr. Chairman and distinguished members of the subcommittee.

I'm honored to appear before you today representing our United States Air Force. I'm especially honored to be here with General John Jumper, the Air Force Chief of Staff. Together, we direct a fantastic group of military and civilian airmen at work every day defending this country.

I thank this subcommittee and the entire Congress for your support to our airmen. We will need your continued support as we face demanding challenges in the months and years ahead.

As Acting Secretary, I have five major priorities for the coming months. They are, first, recapitalizing our force; second, weathering the 2005 fiscal storm; third, re-balancing and shaping our force; fourth, continuing transformation; and, finally, restoring your trust and confidence in the Air Force and its leadership.

#### RECAPITALIZING AGING SYSTEMS

The Air Force's number one challenge is recapitalizing our aging systems. We need to find the right balance between acquiring new systems and keeping our legacy systems flying. Addressing this long-term recapitalization problem is made all the more demanding by the huge shortfalls we face this year in our personnel and operations accounts. General Jumper and I recently directed the Air Force to cut back on peacetime readiness and training operations to conserve funds. But cutting back, alone, can't close the \$3 billion gap in our operation and maintenance (O&M) account. We are also short some \$700 million in our military personnel account. And there, too, cutting back will not close the gap. We'll need your help, by acting quickly on the President's supplemental budget request and by considering favorably the painful reprogramming actions we will undoubtedly forward to you in the coming months.

#### FORCE SHAPING

In force shaping, we face the challenge of our own success. In the current fiscal year, we temporarily slowed recruiting so that the Active Force will be at or below our congressionally authorized end strength by October 1. Fiscal year 2006 will return us to a normal recruiting year, and we'll need your support in the fiscal year 2006 appropriation for robust recruiting and accession programs. Our goal is a properly sized and shaped force, with the right end strength, the right skill mix, and the right balance between active duty, Guard, Reserve, and civilians.

#### CONTINUING TRANSFORMATION

My fourth priority is to sustain our momentum in transforming the way we manage our part of the Department of Defense enterprise. From the national security personnel system to our capabilities review and risk assessment, base requirements determination process, to improved information-technology domain management, we are ensuring that our Air Force remains efficient, agile, and adaptable to meet the emerging threats of this century.

#### RESTORING TRUST AND CONFIDENCE

Finally, I'm concerned that events of the last few years have eroded your trust and confidence in your Air Force and its leaders. Restoring that trust and confidence is a solemn obligation I take very seriously.

Mr. Chairman and distinguished members of the subcommittee, thank you again for your consistent support. The United States Air Force remains committed to protecting and defending our country's interests at home and abroad by enabling freedom of maneuver for joint and coalition forces and applying combat power, when directed. We are meeting today's threats, and, with your continued support, we will be prepared to meet tomorrow's threats, as well.

#### PREPARED STATEMENT

Thank you for the opportunity to be here today. I look forward to your questions.

[The statement follows:]

#### PREPARED STATEMENT OF HONORABLE MICHAEL L. DOMINGUEZ AND GENERAL JOHN P. JUMPER

Mr. Chairman and distinguished members of the committee, the Air Force has a boundless future. The Service continues its transformation to meet the emerging challenges of a dynamic world, and to ensure the nation's security by dominating the global commons of air, space, and cyberspace. The fiscal year 2006 budget takes a significant step toward that future.

During the last decade the United States Air Force transformed to a modular expeditionary force of ten Air Expeditionary Force packages providing agile air and space power that has proven so successful across the spectrum of operations from No-Fly Zone operations to the Global War on Terrorism. We will continue transforming to meet the challenges of a dynamic world by rebalancing the force and re-aligning our structure into a Future Total Force that meets increased demands for persistent intelligence, rapid mobility, and precision strike capabilities. These requirements-based capabilities, derived from our Concepts of Operation, are the necessary capabilities for joint and combined force operations; and represent the trades available between and among service components to deliver the right effects to combatant commanders.

We are rebalancing the force by prudently changing our accession goals and re-aligning manpower to overstressed career fields to better balance our Airmen skill sets to get us to our authorized end strength. We will take advantage of our Total Force expertise by more closely aligning our Active Duty, Air National Guard, and Air Force Reserve units into associate units to enhance our overall capability. We will transform our command and control structure by establishing new Warfighting Headquarters, positioned globally, to provide Combatant Commanders the most effective means to command and control air and space forces. The efficiencies realized will help ensure the air dominance required for U.S. global operational access. But reorganization is just one effort used to adapt and enhance our force.

Recapitalization and modernization of our aging weapon systems and wise investments in science and technology are crucial if we are to realize improvements in close air support, long-range strike, and operationally responsive space. Likewise, changes in the traditional methods of deterrence will require new capabilities to transform the current Triad of intercontinental and sea-launched ballistic missiles, and bomber aircraft into a New Triad—a diverse portfolio of non-nuclear and nuclear "strike capabilities" and active and passive defenses. While we remain engaged in contingency operations and homeland defense missions, we look to the future where completely networked, horizontally integrated operations will lead to complete domination of the global commons of air, space, and cyberspace.

Our 2005 Posture Statement reflects our good stewardship to manage, maintain, and develop an irreplaceable defense resource—America's Air Force. It is our vision for the future—a future in which the world's finest Airmen, together with our sister Services, will remain effectively decisive in combat to attain victory.

## INTRODUCTION

Today's security environment is characterized by change and ambiguity. The future will include a variety of challenges, including the risk of catastrophic attacks on the homeland, and the possibility of disruptive technological breakthroughs by our adversaries. The number and character of potential U.S. adversaries is growing and changing, as states and non-state actors acquire advanced technology and even weapons of mass destruction. We can foresee the near-term threats posed by ballistic and cruise missiles; chemical, biological, radiological, and nuclear weapons; advanced double-digit surface-to-air missiles; and sophisticated combat aircraft. We should also anticipate computer network attacks and attacks on other critical infrastructure, including space networks. Not only must we be prepared to confront these known threats, but we also must be ready for unexpected, disruptive breakthroughs in technology that may undercut traditional U.S. advantages. Maintaining a strong defense able to overcome and defeat these threats remains an imperative for our nation. Currently, the Air Force can command the global commons of air and space, and significantly influence the global commons of sea and cyberspace; however, we cannot maintain this advantage using yesterday's technology in the systems and air and space vehicles of our current force structure. Recapitalizing our aging systems is our number one challenge.

We are steadfastly meeting these challenges head on. With capabilities-based planning; investments in modernization, science and technology; Airmen development; and a focus on integration, we will transform into a more lethal force.

We are working with equal intensity to increase the integration and effectiveness of the joint and interagency team. The Air Force is responsible for several missions essential to the successful prosecution of any joint expeditionary operation: we provide the persistent intelligence and communications networks that deliver decision-quality information to the joint force commander; we provide global mobility in the airlift and tanker forces that move people and equipment anywhere on the planet; and we provide rapid strike by employing an umbrella of kinetic and non-kinetic strike capabilities to deliver precise, tailored effects.

For America to hold its military advantage, the Air Force must continue to improve its vital national capabilities. This means anticipating the battlespace effects required in the future; we must begin today to create the force we will need tomorrow. The Air Force must adapt for the future without degrading its ability to conduct operations now and in the near term. At the same time, we must recognize fiscal constraints and remain a responsible custodian of the taxpayers' dollar. We have developed a long-range plan to allocate resources, balance risks, and shape the force to protect our nation—a comprehensive Future Total Force (FTF).

Within FTF, we are restructuring our organizations for the decades ahead. The organizational concept within FTF leverages the strengths of all three components (Active Duty, Air Force Reserve, and Air National Guard), as well as anticipated advances in technology, to create the effects needed in tomorrow's battlespace. FTF encompasses all domains: space, air, ground, and information. Most importantly, it capitalizes on our most potent, flexible resource: our Airmen.

Our Airmen are a vital national resource. A key element in their development is continuing to adapt the force structure to support expeditionary operations. We face the paradox of suffering shortfalls in certain high-demand career fields while exceeding our overall congressionally authorized end strength. Therefore, we have enacted several programs to reduce the total number of Air Force personnel while reinvigorating career fields experiencing shortfalls.

As this century unfolds, technological innovation is accelerating at an unprecedented pace. Our challenge is to quickly convert laboratory ideas into battlefield effects. This entails more than creating new weapon systems; it means adopting a developmental culture that is inherently agile and responsive, enabling state-of-the-art technologies to reach the battlefield in real time. Such institutional agility will allow us to aggressively divest our legacy systems, field the capabilities needed to meet new strategic challenges, and integrate operations with those of the other Services and our coalition partners.

Air and space power is an essential component of a joint warfighting team and a critical force multiplier for our Soldiers, Sailors, and Marines. Our paramount responsibility is to provide air and space dominance over the battlefield to enable the freedom of maneuver necessary for the success of joint and coalition operations.

Whether strengthening the capabilities of Airmen on the battlefield; enabling joint service net-centric operations; furnishing more airlift and aerial refueling capability; or establishing an Air Component Coordination Element with ground force commanders, the Air Force is committed to increasing support to the joint warfighter. The United States Air Force makes the whole team better.

## AIR AND SPACE POWER TODAY

Even as the Air Force moves forward with the Future Total Force, we are engaged around the globe. Across many continents and missions in air and space, the Air Force is a complete partner with our sister Services, inter-agency partners, and friends and allies.

*Global War on Terrorism*

Since the shockwaves of September 11, 2001, the Air Force has been integral to conducting and enabling joint and coalition operations in the Global War on Terrorism (GWOT). Across three campaigns, Operation NOBLE EAGLE (ONE), Operation ENDURING FREEDOM (OEF) and Operation IRAQI FREEDOM (OIF), the Air Force capabilities of rapid strike; global mobility; and persistent command, control, communications, computers, intelligence, surveillance, and reconnaissance (C<sup>4</sup>ISR) helped defend the air sovereignty of North America; break Taliban control of Afghanistan; identify, target, and destroy al Qaeda terrorist nests in Afghanistan; overthrow Saddam Hussein's regime; and conduct reconstruction and counter-insurgency operations in Iraq. Although the threat of terrorist attacks against the United States remains, the joint team—strengthened by the Air Force—has made substantial progress in putting terrorists on the defensive and developing the new security partnerships essential for a sustained GWOT.

*Operations IRAQI FREEDOM and ENDURING FREEDOM*

The Air Force continues joint operations against Taliban remnants and Iraqi insurgents. At the close of 2004, we maintained nearly 31,000 Airmen in the region—including 5,000 Air National Guardsmen and 2,500 Air Force Reservists—and we were flying 225 sorties a day over Iraq and Afghanistan. Having already flown more than 250,000 sorties, the Total Force team of Active, Guard, and Reserve Airmen continues to perform aeromedical evacuation, persistent C<sup>4</sup>ISR from air and space, close air support, aerial refueling, and intertheater and intratheater airlift, while successfully adapting to the dynamic environment of asymmetric warfare.

While certainly prominent in Major Combat Operations, rapid strike has continued to enhance joint warfighting during reconstruction and stability operations. Strikes against Taliban forces and Iraqi insurgents show the enduring need for strike capabilities and the capability of the Air Force to strike time-sensitive targets with minimal collateral damage. The Air Force is bolstering this capability with the deployment of 500-pound Joint Direct Attack Munitions now in theater, development of the Small Diameter Bomb, and development of directed energy weapons capable of delivering precise and tailored effects in adverse environments.

Not only are Airmen directly overhead in Iraq and Afghanistan, but Airmen from as far away as Nevada are controlling remotely piloted aircraft critical to persistent C<sup>4</sup>ISR and rapid strike missions. For instance, Predator aircraft are able to transmit their live video pictures to ground-based targeting teams that are equipped with the prototype Remote Operations Video Enhanced Receiver (ROVER) system. Linking rapid strike and persistent C<sup>4</sup>ISR to forces on the ground, ROVER has been used repeatedly to detect, target, and destroy improvised explosive devices (IEDs), mortars, rockets, and other insurgent activities across the region. Bolstering these capabilities are Tactical Airborne Reconnaissance System (TARS) equipped F-16s flown by deployed Air National Guard units. The digital cameras on the TARS pod allow the pilot to conduct reconnaissance while simultaneously providing close air support. Integrating these two missions is the essence of responsive reconnaissance and integral to Air Force support to ground forces.

To help defeat IEDs, the Air Force has fielded Specialized Explosive Detection Dogs and upgraded three flying platforms that specifically focus on detecting and defeating IEDs. In the future, we will deploy IED Defeat Field Teams to further study where Air Force-unique systems can make an impact.

To ensure uninterrupted sustainment of our deployed forces and unhindered global mobility, several initiatives are being implemented to enhance aircraft protection capabilities, including upgrades to existing aircraft defensive systems, accelerated installation of new systems, and improvements in software and flare dispensing patterns. These improvements will increase the capability to detect and defeat shoulder-fired missiles being used against our mobility aircraft.

Recently, these mobility assets have been used to reduce the need for ground convoys on supply routes in Iraq. Flying above the IEDs and ambushes that challenge convoys, the use of Air Force airlifters like the C-130 and C-17 has reduced the number of trucks in convoys by nearly 350 trucks per day.

Operations in Iraq and Afghanistan also highlight the importance of space-based C<sup>4</sup>ISR capabilities to U.S. and coalition forces. These capabilities have become integral to effective warfighting operations and include precision position, navigation

and timing; secure communications; global weather; launch and support operations; persistent worldwide missile warning; and intelligence gathering. OIF and OEF relied on the all-weather precise position, navigation, and timing capability provided by the Air Force's Global Positioning System (GPS) constellation, satellite communications (SATCOM), and timely observations of weather and enemy activity. Carrying out time-sensitive targeting of Iraqi leadership and other critical targets during major combat operations, nearly 40 percent of all munitions used in OIF were GPS-guided and unaffected by the driving sand storms and inclement weather. Holding the ultimate high ground, Air Force space professionals keep a constant vigil over a global battlespace—planning, acquiring, maintaining and operating the systems that sustain America's decisive advantage in space.

#### *Operation NOBLE EAGLE and Homeland Defense*

The Air Force's principal Homeland Defense mission is Air Defense and preserving the air sovereignty of the United States and its territories. Since 9/11, more than 37,000 fighter, aerial refueling, and airborne early warning sorties have been flown in defense of the United States, while more than 1,800 air patrols have responded to actual incidents and suspicious flight operations. A mission that leverages the Air Force Reserve, Air National Guard, and Active Duty components, the Citizen Airmen of the Air National Guard have primary responsibility for providing alert aircraft at 17 of 18 sites.

The Air Force has also worked extensively with joint, interagency, and combined organizations to improve the effectiveness of Homeland Defense activities. Exercises like DETERMINED PROMISE-04 and UNIFIED DEFENSE-04 illustrated how rapid strike, persistent C<sup>4</sup>ISR, and global mobility can be seamlessly integrated with other agencies, and prove critical to supporting U.S. Northern Command and the Department of Homeland Security.

The Civil Air Patrol provides additional capability to Northern Command, federal agencies, and state and local governments in the Global War on Terrorism. Located throughout all 50 states, the District of Columbia, and Puerto Rico, the Civil Air Patrol leverages the skills and vigilance of 64,000 non-paid volunteers in more than 1,700 units to bolster the Nation's defense.

#### *Other Contingency Operations*

In addition to operations at home and Southwest Asia, the Air Force supported multiple other operations around the globe in 2004. Complementing our permanent presence in Northeast Asia, we bolstered the deterrence of North Korea with the continuous deployment of six B-52 bomber aircraft to the American territory of Guam. The 8,400 Airmen stationed in South Korea alongside Soldiers, Sailors, Marines and our South Korean allies are critical to regional stability, and have maintained the United Nations armistice on the Korean peninsula for over 51 years.

In the Balkans, Airmen have flown more than 27,000 sorties in support of Operations JOINT FORGE and JOINT GUARDIAN. These NATO-led operations combine joint and allied forces to implement the Dayton Peace Accords in Bosnia-Herzegovina and enforce the Military Technical Agreement in Kosovo. At the end of 2004, approximately 475 Airmen were supporting NATO's goal of achieving a secure and stable environment.

Since December 1989 and throughout 2004, Airmen have been a critical part of the interagency fight against illegal drug and narcotics trafficking. Deployed along the southern United States, in the Caribbean, and Central and South America, eight aerostats and five ground-based radars provide around-the-clock monitoring of airspace. Operating these C<sup>4</sup>ISR installations, Airmen detected, monitored, and provided intercepts on hundreds of targets attempting to infiltrate U.S. airspace without proper clearance. Along with our joint and interagency partners, these operations resulted in hundreds of arrests and stopped thousands of pounds of contraband from being smuggled into the United States.

Additionally, the Air Force is heavily involved in providing humanitarian relief to people in need around the globe. Most recently the Air Force deployed aircraft and Airmen to assist in relief efforts for the Southeast Asian countries struck by tsunamis. In the initial days, C-130s and KC-135s, flying 21 missions, delivered over 120 tons of food, water, medical supplies, vehicles, and personnel to assess relief assistance. In another region of the world, the Air Force provided airlift and logistical support to the deployment of African Union peacekeepers to the war torn area of Darfur in Sudan. Also, during recent elections in Afghanistan, we airdropped water and food to remote areas to help ensure a secure and smooth voting process.

Supporting all of these world-wide operations is a robust training program that allows our Airmen to train like they fight. Competition for scarce air, land, and water resources threatens to further encroach onto our installations, ranges, and

airspace—vital national assets for developing and testing new weapons, training forces, and conducting joint exercises. The Air Force supports legislative, regulatory, and management initiatives that protect Air Force operational capability while sustaining, restoring, and modernizing our natural infrastructure.

#### *Air and Space Expeditionary Force*

The Air and Space Expeditionary Force (AEF) is how the Air Force organizes, trains, equips, and sustains forces to meet defense strategy requirements outlined in the National Military Strategy and Strategic Planning Guidance. Including the Active Duty, Air Force Reserve, and Air National Guard, the Air Force is divided into ten AEFs and an enabler force to support and sustain global expeditionary operations. Each AEF provides a portfolio of effects-based capabilities for the Combatant Commander. These capabilities are immediately available in two AEFs continually postured for rapid deployment. The remaining eight AEFs are in various stages of redeployment, rest, training, or deployment preparation but could rapidly deploy to a combat area if needed. When necessary, the full capability of the Total Force can be realized by surging the remaining AEFs.

During 2004, worldwide requirements of OIF, OEF, and GWOT placed high demands on our Expeditionary Combat Support (ECS) forces, long-range bombers, security forces, and other units. Due to this increased tempo, selected Air Force forces are still deployed at nearly twice the numbers that AEF policy defines as "sustainable." To adapt to this new set of circumstances, we changed our AEF deployment length from 90 days to 120 days, and the AEF cycle from fifteen months to twenty months. The greater deployment length allows greater continuity for expeditionary commanders in the field.

#### *New Triad*

The National Military Strategy impacts our strategic forces as well. The Department of Defense's new defense strategy of employing a capabilities- vs. threat-based approach to planning led to the ongoing transformation of the existing triad of U.S. strategic nuclear forces (intercontinental and sea-launched ballistic missiles and bomber aircraft) into a New Triad composed of a diverse portfolio of systems. The elements of the New Triad will contain non-nuclear and nuclear "strike capabilities;" active and passive defenses; and research and development and industrial infrastructure for developing, building, and maintaining offensive forces and defensive systems.

#### *Worldwide Force Protection Challenges*

The United States faces an array of asymmetric threats from terrorists and rogue states necessitating a new Force Protection concept of Integrated Base Defense. The new concept draws from recent lessons learned and defines a Force Protection role for every Airman as a defender of bases and critical assets. We are also developing a wide range of offensive and defensive capabilities to include new ground sensors, unmanned aerospace sensors, a common operating picture, and a command and control suite that links these sensors to remotely-operated weapons and robotic systems. Non-lethal weapon systems have the potential for bringing a revolutionary set of capabilities to commanders.

Countering and defending against chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) weapons is another element of Force Protection and Integrated Base Defense. To prevent adversary acquisition or development of these weapons, neutralize their capabilities, and restore essential operations and services after an attack, we are implementing a Counter-CBRNE Master Plan. This will improve our ability to meet operational needs, while maximizing joint cooperation and leveraging existing institutions and capabilities.

#### AIR AND SPACE POWER, TOMORROW THROUGH THE FYDP

#### *Base Realignment and Closure 2005*

Base Realignment and Closure (BRAC) 2005 is the primary means by which the Air Force will optimize current infrastructure to enhance both warfighting capability and efficiency for the future. Taking a comprehensive, 20-year view, BRAC 2005 will allow the Air Force to realign the posture of our forces to better address the new challenges we face. Through creation of innovative organizational and basing solutions, the Air Force will facilitate joint and multi-component missions, reduce inefficiencies, and free up valuable resources to recruit quality people, modernize equipment and infrastructure, and develop the capabilities needed to meet 21st Century threats.

While doing this we will remain focused on our three core competencies, which enable us to create the effects required on the battlefield of the future: Developing

Airmen, Technology to Warfighting, and Integrating Operations. By focusing on these areas the Air Force has created a program through the Future Years Defense Program, which optimizes the return on our resources.

#### *Developing Airmen*

To adapt to dramatic changes in force structure and the security environment, we established a set of strategic goals to focus our personnel mission.

#### *Force Shaping*

We are on track to bring active duty end strength to the congressionally-authorized level of 359,700 by the end of fiscal 2005. This planned reduction shapes the future force without jeopardizing career field health.

The Force Shaping plan has two phases: (1) increase voluntary separations and retirements, and (2) further increase voluntary separations while simultaneously reducing programmed accessions. Phase 1, implemented in February 2004, was used to judge retention behavior and ensure a measured approach to reducing end strength. Phase 2, begun in May 2004, allowed more service members an opportunity to leave active duty. Additionally, we significantly reduced the Selective Re-enlistment Bonus (SRB) program from 146 to 62 enlisted skills, resulting in a significant decrease in first-term reenlistment rates, and we continue to review further reduction of SRB skills.

Other Force Shaping initiatives include the PALACE CHASE program—early separation from Active Duty to serve with the Air National Guard or Air Force Reserve—waiving of active duty service commitments, and resurrection of the Career Job Reservation Program to correct skill imbalances and re-train first-term Airmen into needed skills. Additionally, we took advantage of the statutory authority that allows 2 percent of colonels and lieutenant colonels with two years time-in-grade to retire in grade instead of waiting the normal three years; and some Air Force Reserve Officer Training Corps graduates may now go directly into the Air National Guard or Air Force Reserve.

In fiscal 2004, we lowered accession goals by approximately 3,000. In fiscal 2005, we continued to lower our accession goals and have temporarily limited enlisted accessions to only the 58 most critical combat and combat support skills.

The results of our Force Shaping efforts are positive, facilitating the migration of personnel into critical shortage specialties while reducing manpower to ensure we meet authorized end strength requirements by the end of fiscal 2005.

#### *Rebalancing the Force*

As we return to our authorized end strength, relief is flowing to “overstressed” career fields. This is a multi-step process, but our guiding principle is simple—we will properly size and shape the force to meet the needs of the AEF. We are drawing down prudently, designating specialties and specific year groups within those specialties where we have more people than we need. At the same time, we are correcting our skill imbalances by realigning manpower and expanding training pipelines.

We are also taking a hard look at where our people serve. We have Airmen serving outside the Air Force who don’t deploy as part of an Air Expeditionary Force. They serve in joint and defense agency positions, some of which require uniformed people; however, others do not. Through military-to-civilian conversions and Competitive Sourcing initiatives, we are returning these Airmen “to the fold.”

The Guard and Reserve play a critical role in this endeavor. Today, 25 percent of the air expeditionary packages are composed of Air National Guard and Air Force Reserve volunteers. As we take steps to ensure the long-term health of our Active Duty forces, we must do the same for our Citizen Airmen.

#### *Recruiting/Retention*

While reducing accessions is a tool currently being used to bring the force down to authorized levels, it is imperative that we continue to renew and replenish the ranks with targeted recruiting. For fiscal 2005, we plan to access nearly 19,000 enlisted members and just over 5,000 officers—a 44 percent reduction from normal enlisted recruiting levels and a slightly lower level of officers compared to fiscal 2004.

As outlined under Force Shaping, a significant one-year reduction in our recruiting goal is part of a deliberate effort to reduce force size without jeopardizing long-term health. A one-year reduction will create a temporary decrease offset by the number of personnel accessed in preceding and subsequent years. We are committed to returning to normal recruiting targets as quickly as possible. Continued congressional support of our recruiting and marketing programs will greatly enhance the Air Force’s competitiveness in a dynamic job market.

A critical element for success is the ability to offer bonuses and incentives where we have traditionally experienced shortfalls. To protect this valuable resource we ensure active senior leadership management, including semi-annual reviews of which career specialties, and which year groups within those specialties, are eligible for bonuses. Congressional support for these programs, along with increases in pay and benefits and quality-of-life initiatives, has greatly helped us retain Airmen and their families.

#### *Personnel Service Delivery Transformation*

To achieve the Secretary of Defense's objective of shifting resources "from bureaucracy to battlefield," personnel services are being overhauled. Our Personnel Service Delivery Transformation dramatically modernizes the processes, organizations, and technology by which we support Airmen and their commanders. Routine personnel transactions, for instance, may now be done "on-line."

As a result, we deliver higher-quality personnel services with greater access, speed, accuracy, reliability, and efficiency. We programmed the resulting manpower savings to other compelling Air Force needs over the next six years. This initiative enhances our ability to acquire, train, educate, and deliver Airmen with the needed skills, knowledge, and experience to accomplish Air Force missions.

#### *National Security Personnel System*

Our civilian workforce will go through a significant transformation as well with implementation of the Department of Defense National Security Personnel System (NSPS). NSPS is a simplified and more flexible civilian personnel system that will improve the way we hire, assign, compensate, and reward our valuable civilian employees. This modern, agile human resource system will be responsive to the national security environment, while preserving employee protections and benefits, as well as the core values of the civil service. Implementation will begin as early as July 2005.

NSPS design and development has been a broad-based, participative process including employees, supervisors and managers, unions, employee advocacy groups, and various public interest groups. Employees slated for conversion to the new system will be included in groupings called Spirals. Spiral One will include approximately 85,400 General Schedule and Acquisition Demonstration Project, U.S.-based Air Force civilian employees and will be rolled out in three phases over an 18-month period. The labor relations provisions of NSPS will be implemented across the Department this summer as well. NSPS is the most comprehensive new Federal personnel system in more than 50 years and a key component in the Department's achievement of a total force structure.

#### *Culture of Airmen*

We completed an Air Force-wide assessment of our sexual assault prevention and response capabilities, knowing we were not where we needed to be in addressing this societal problem that has serious readiness implications. A Campaign Plan was approved, and we are implementing specific initiatives to better understand the problem of sexual assault, do everything within our ability to prevent it, and prepare ourselves to provide consistent and continuing care for victims when it occurs.

In response to an increased suicide rate among Airmen, we reemphasized, and continue to stress, the need for Airmen to look after one another. Commanders and co-workers are rethinking the way Airmen interact with one another, calling attention to behavioral indicators and risk factors associated with suicide. Safety and risk management are also being emphasized to reduce the number of accident-related fatalities. We are weaving this mindset into the very fabric of our culture.

All Airmen have a responsibility to get involved, pay attention and ensure the health and well-being of their wingman. It's not a program, it's a mindset; a cultural shift designed to take better care of our most valuable resource—our people.

#### *Air Reserve Component (Air Force Reserve and Air National Guard)*

Recruiting and retaining quality service members are top priorities for the Air Force Reserve. Despite the strains mobilization places on the personal and professional lives of Reserve members, volunteerism remains high. In fiscal 2004, and for the last four years, the Air Force Reserve exceeded its recruiting goal. Despite the long-term effects of high operations and personnel tempo, Air Force Reserve end-strength was within 0.7 percent of fiscal 2004 congressionally-mandated requirements.

Reduced success in attracting military Air Force members who are separating from Active Duty has steered the Air Force Reserve toward recruitment and accession of non-prior service members. To meet the resulting increased training demand, 4,000 training slots per year are now allocated and funded for the Air Force Re-

serve. In addition, the Air Force Reserve is taking advantage of the previously mentioned PALACE CHASE program, which allows Active Duty members the opportunity to move to the Air Force Reserve or Air National Guard. These experienced members are then placed into critical career skills.

Complementing the Air Force Reserve, the Air National Guard plays a vital role in support of the Homeland Defense mission and force transformation. The ability of the Air National Guard to achieve recruiting and retention goals through fiscal 2006 will help determine how well the Air Force assumes new missions and supports Homeland Defense.

As the Air Force Reserve and Air National Guard continue to surge to meet operational requirements, we are examining existing law and policy that govern enlisted incentives and related compensation with an eye toward identifying changes that will encourage volunteerism. The reserve enlisted bonus program is a major contributor to attracting and retaining both unit and individual mobilization augmentee members in critical career fields. To enhance retention, we are ensuring relevant compensation statutes reflect the growing reliance on the Air Force Reserve and Air National Guard to accomplish Air Force missions. We continue to explore enhanced bonus authorities, which will provide the flexibility to target our most pressing needs.

In addition, the Aviation Continuation Pay, the Career Enlisted Flyers Incentive Pay, and Aircrew Incentive Pay continue to be offered to retain our rated officer and enlisted personnel. We expanded the Air Force Reserve Special Duty Assignment Pay (SDAP) program by including an additional six career fields to enhance recruiting and retention, improve program alignment, and provide parity to Air Force Reserve members. The expansion authorizes the payment of SDAP to a reservist qualifying in the same skill and location as their Active Duty counterpart.

The Air Force has made great strides in increasing education benefits for our Air Force Reserve and Air National Guard members, offering 100 percent tuition assistance for individuals pursuing an undergraduate degree and continuing to pay 75 percent for graduate degrees. In addition, we appreciate the President proposing and Congress enacting enhanced Montgomery GI Bill benefits for reserve and Guard members who have served lengthy deployments.

The fiscal 2005 National Defense Authorization Act (NDAA) made permanent several authorities providing enhanced Health Care/TRICARE benefits for Air Force Reserve and Air National Guard members. For members with delayed-effective-date orders to serve on active duty in support of a contingency operation for more than 30 days, the new legislation permanently authorizes TRICARE eligibility for up to 90 days prior to the member's activation date for eligible members and their families. Additionally, the NDAA extended the Transitional Assistance Management Program benefit period from 60 and 120 days to 180 days for eligible members and their families.

#### *Training*

Distributed Mission Operations (DMO) is the cornerstone for Air Force training transformation. It is a readiness initiative to train warfighters as they expect to fight using simulation and high-fidelity architecture to link training at dispersed locations. DMO will reduce travel costs and operations tempo while providing mission rehearsals in an operationally realistic environment to maintain combat readiness and provide support to operations. It will prepare and assess Air and Space Expeditionary Forces and prepare AOC weapon systems, including Joint Force Air Component Commanders, for real-world missions. As an integration effort, DMO will leverage existing and emerging programs and technologies to fill gaps in total team training, rehearsal, and operations support.

Due to the continuing high operations tempo, the Air Force is filling over 2,500 positions in 20 different combat support skills for the U.S. Army in deployed locations—one of those skills is combat convoy operations. As a result, we established the Basic Combat Convoy Course to supplement Army training. This comprehensive, self-contained course emphasizes small unit leadership, teamwork, weapons training, and tactical convoy operations, greatly improving convoy operations and personnel survivability. It also reduced total training time in Kuwait from approximately six weeks to one.

#### *Housing and Military Construction*

Through military construction and housing privatization, we are providing quality homes faster than ever. Over the next two years, we will renovate or replace nearly 36,000 homes through privatization, and an additional 11,000 homes through military construction.

Still, Airmen primarily live in communities near our installations. Basic Allowance for Housing increases have reduced their average out-of-pocket costs over the past few years, and will eliminate out-of-pocket costs altogether in 2005, allowing greater flexibility for Airmen who reside off base.

Investment in dormitories continues to accelerate in order to provide superior housing to our unaccompanied members—evidenced by nearly 4,400 dormitory rooms programmed for funding over the next four years. Approximately 75 percent of these will address existing inadequate dormitory conditions. Our new “Dorms-4-Airmen” standard is designed to increase camaraderie, social interaction, and accountability by providing four single-occupancy bedrooms/bathrooms with a common kitchen and living area in each module. The combination of the new standard and the Air Force’s unit integrity assignment policy provides an excellent platform to increase interaction within the same unit. Finally, the remaining dormitory program jumpstarts a buy-out of inadequate “pipeline” dormitories—those dorms that house young enlisted students during their initial technical training. Pipeline dormitory standards provide a large living area for two students, two walk-in closets, a bathroom, and a separate vanity for each occupant. All substandard dorms will be replaced by 2009. Knowing the Air Force provides for a family’s housing needs allows every Airman to focus on the mission.

Airmen’s performance and morale is directly influenced by quality work centers as well. Therefore, we’ve placed significant emphasis on recapitalizing and improving work facilities. We’ve focused investment in training facilities to ensure a quality technical and mission-oriented learning environment. Similarly, we’ve implemented a plan to ensure all fitness centers meet current Air Force standards by 2011. Finally, we’ve continued our focus on providing quality childcare facilities.

#### *Battlefield Airmen*

Airmen are engaged beyond the air base; bringing technology to warfighting on the ground using advanced systems to designate targets, control aircraft, rescue personnel, and gather vital meteorological data. The Air Force is optimizing this family of specialties, known as Battlefield Airmen. So far, we have identified program management, acquisition, and sustainment synergies across the Combat Rescue, Combat Control, Terminal Attack Control, and Special Operations Weather functional areas. Because Air Force personnel are an integral part of the battlespace, we are also identifying common training requirements for these Airmen.

We need to organize Battlefield Airmen for maximum effectiveness in the modern battlespace. In addition, we must train Battlefield Airmen in the skills required to maximize airpower, and standardize that training across those specialties with different Battlefield Airmen skills. Finally, we want to equip our Battlefield Airmen with improved and standardized equipment for missions in the forward and deep battlespace.

This will expand commanders’ abilities to employ battlefield airpower experts who can introduce unequaled accuracy, responsiveness, flexibility, and persistence into designated air operations.

Joint Terminal Attack Controllers (JTACs), a subset of Battlefield Airmen, direct the action of combat aircraft engaged in close air support and other offensive air operations from a forward position. For the first time, JTACs will be recognized across the Department of Defense as capable and authorized to perform terminal attack control in accordance with a joint standard. The Joint Close Air Support Executive Steering Committee directed the drafting of a Memorandum of Agreement defining the qualifications, certifications, and currencies these JTACs must possess and maintain.

In addition to night-vision equipment, JTACs carry a hardened laptop computer and multi-channel radio. We’ve significantly reduced the weight these Battlefield Airmen must carry while simultaneously providing them with the ability to do such things as designate targets several kilometers away. We must further decrease the weight of their gear while increasing the capabilities and interoperability of their equipment with other air, space, and ground assets. This combination of technology facilitates the direct transfer of information to combat aircraft, minimizing errors in data transfer. To that end, the Integrated Air-Ground Imaging Initiative enables the A-10 to send digital targeting information instead of lengthy voice briefings; provides a LITENING or Sniper Targeting Pod video down link to the JTAC; and equips our JTACs with a multi-channel video receiver. This equipment will increase situational awareness, assist in combat identification, maximize first-attack success, shorten the kill-chain, and ultimately provide better support to ground forces.

### *Technology-to-Warfighting*

#### *Capabilities-based Concepts of Operation*

The Air Force has established a capabilities-based approach to both war planning and force development, allowing focused investments on those capabilities needed to achieve the battlespace effects required by the joint warfighter. Our capabilities-based approach frees us from platform-centric force planning, leading to new ways of thinking and innovative combinations of systems.

The Air Force has developed seven concepts of operation (CONOPS)—six operational and one supporting foundational concept—for capabilities-based planning. The CONOPS define the effects we can produce across the span of joint tasks we may be tasked to perform, and help us identify those capabilities an expeditionary air force will need to achieve the desired battlespace effects. They also provide an operational context for determining how good our capability levels need to be and assessing how close we are to that objective.

- Homeland Security CONOPS leverages Air Force capabilities with joint and interagency efforts to prevent, protect, and respond to threats against our homeland.
- Space and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C<sup>4</sup>ISR) CONOPS encompasses the integration of manned, unmanned, and space systems to provide persistent situational awareness, space control, and decision-quality information.
- Global Mobility CONOPS provides the planning, command and control, and operations capabilities to enable timely and effective projection, employment, and sustainment of U.S. power in support of U.S. global interests.
- Global Strike CONOPS employs joint power projection capabilities to engage anti-access and high-value targets, gain access to denied battlespace, and maintain that operational access for required joint/coalition follow-on operations.
- Global Persistent Attack CONOPS provides a spectrum of capabilities from major combat to peacekeeping and sustainment operations. Global Persistent Attack assumes that once access conditions are established via the Global Strike CONOPS, there will be a need for persistent and sustained air, space, and information operations.
- Nuclear Response CONOPS provides the deterrent “umbrella” under which conventional forces operate and, should deterrence fail, provides options for a scalable response.
- The Agile Combat Support CONOPS details the capability to create, protect, and sustain Air and Space Forces across the full spectrum of military operations. It is the foundational, crosscutting, and distinctive capability that enables Air Force Operational Concepts.

The CONOPS approach articulates operational capabilities that will prevail in combat and avert technological surprises. Through capabilities-based planning, we will continue to invest in our core competency of bringing technology to the warfighter, which will maintain our technical advantage and keep our air and space capabilities up-to-date.

#### *Capabilities Review and Risk Assessment*

The Capabilities Review and Risk Assessment (CRRA) process is the starting point for Air Force force planning and capabilities development. It replaced an outdated threat-based review process that focused on platforms instead of warfighting effects and the capabilities needed to achieve them. The CRRA requires a focus on capabilities and fosters development of innovative solution sets. The CRRA uses our six operational concepts and the foundational Agile Combat Support concept to examine and assess our Air Force capabilities now and in the future.

During the CRRA cycle, Risk Assessment Teams, composed of experts drawn from all specialties in the Air Force and supported by models, simulations, and other analytical tools, consider the requirements of the CONOPS. They review existing and planned programs, Science and Technology activities, and non-materiel factors. They determine the Air Force’s ability to deal with an adverse event and the impact on achieving the joint warfighting effects if the Service fails to provide the capability. Any shortfalls are screened against documented Lessons Learned and Combatant Commander Integrated Priority Lists.

The CRRA provides senior Air Force leaders an operational-, capabilities-, and risk-based focus for investment decision-making. It uses operational warfighting effects as the drivers for Air Force resource allocation, while also protecting public health and natural resources.

*Recapitalization / Modernization*

The number one challenge for the Air Force is the need to recapitalize our aging systems. For example, our aircraft fleet now averages 23 years old. To determine the viability of these aging fleets, we chartered the Air Force Fleet Viability Board (AF FVB) in 2004 to establish a continuous, repeatable process for conducting fleet assessments. The AF FVB completed its first assessment, of the C-5A, in July 2004, and is currently studying the 43-year-old KC-135 fleet.

The principles we applied this year during the CRRA process ensured sufficient readiness to support the Global War on Terrorism while transforming the force and maintaining an acceptable level of risk. We have proposed recapitalization and modernization project funding necessary to extend today's legacy forces while bridging to required future systems.

Our primary modernization program is the F/A-22 Raptor. The F/A-22's revolutionary low observable technology, supercruise (Mach 1.5 without afterburner), integrated avionics, and exceptional maneuverability will guarantee America's air dominance and joint force freedom of operation. The F/A-22 program is transitioning from development to full rate production and fielding, where the aircraft will join an integrated air and space force capable of responsive and decisive global engagement.

The program entered Initial Operational Test and Evaluation (IOT&E) in April 2004 to evaluate its operational effectiveness and suitability. Air-to-air capabilities were successfully demonstrated and initial air-to-ground capabilities were demonstrated with successful testing of the Joint Direct Attack Munition. In parallel with IOT&E, F/A-22 aircraft deliveries continue at Tyndall Air Force Base, Florida, where the first cadre of operational F/A-22 pilots is training. The 27th Fighter Squadron at Langley Air Force Base, Virginia, is on track to establish Initial Operational Capability for the F/A-22 in December 2005.

Complementing the tremendous capabilities of the F/A-22 is the F-35 Joint Strike Fighter, an important element of the Joint Warfighter's Tactical Aircraft Modernization plan. For the Air Force, it will recapitalize today's F-16 and A-10 combat capabilities. Specifically, it will provide affordable and survivable precision engagement and global persistent attack capabilities. Optimized for all-weather performance, the F-35 will destroy an enemy's ability to attack or defend. In 2004, the F-35 program successfully addressed early design maturity challenges. The Service Acquisition Executive responsibility also switched from the Navy to the Air Force. In this capacity, we will continue to develop the three basic aircraft variants and coordinate the interests of the Navy and Marines, along with our numerous international partners.

Remotely Piloted Aircraft have demonstrated their combat value in the Global War on Terrorism. The RQ-1/MQ-1 Predator continues to transform warfighting; providing persistent intelligence, surveillance, and reconnaissance; target acquisition; and strike capabilities against time sensitive targets. Used in every Air Force operation since 1995, Predator has amassed over 100,000 flying hours. Today, with U.S.-based flight and mission control, Predator is truly providing a revolutionary leap in how we provide military capability. Equipped with an electro-optical, infrared, and laser designator sensor, and armed with Hellfire missiles, Predator not only shortened the sensor-to-shooter timeline—the sensor is now the shooter.

We are developing the ability to operate multiple aircraft from a single ground station—in effect, multiplying our overall combat effectiveness over the battlefield. We are also developing and deploying a larger, more capable, and more lethal variant—the MQ-9 Predator B. The MQ-9 Predator B will employ robust sensors to automatically find, fix, track, and target critical emerging time sensitive targets.

By contrast, Global Hawk is a high altitude, long endurance, remotely piloted aircraft that provides robust surveillance and reconnaissance capabilities. Through the innovative use of synthetic aperture radar and electro-optical and infrared sensors, Global Hawk provides the warfighter unrelenting observation of intelligence targets in night, day, and adverse weather. Since its first flight in 1998, Global Hawk has flown over 5,000 hours—over half of that time in combat.

Global Hawk provides superior intelligence, surveillance, and reconnaissance data while deployed in support of the Global War on Terrorism. While cruising at extremely high altitudes, Global Hawk can collect information on spot targets and survey large geographic areas, providing military decision-makers the most current information about enemy location, resources, and personnel.

Dissemination and ground support exploitation systems consistently deliver timely intelligence to bring immediate advantage to combat operations. Despite its developmental status, Global Hawk is in constant demand by Combatant Commanders.

The C-17 production program continues to be a success story for the joint warfighting community. We are on schedule to receive the 180th of these force mul-

pliers in 2008. In concert with C-5 modernization programs, C-17 acquisition is the critical enabler for meeting established airlift requirements in support of the current force-planning construct. Currently, the Joint Staff, Office of the Secretary of Defense, and Air Mobility Command are reviewing mobility requirements in light of the new National Military Strategy and the Global War on Terrorism. This Mobility Capabilities Study will provide a basis for determining future wartime airlift requirements. In the meantime, the C-17 has been the airlifter of choice in contingency operations. During Operation ENDURING FREEDOM, C-17s airdropped over two million humanitarian rations. In Operation IRAQI FREEDOM, the C-17 performed the largest troop airdrop since Operation JUST CAUSE in Panama, opening the Northern Front during initial operations.

Tomorrow's enabling capabilities will be hosted on a variety of systems to include the E-10A aircraft. The E-10A is being developed to identify and track enemy, friendly, and neutral forces, as well as non-combatants. It will provide persistent intelligence, surveillance, reconnaissance, and environmental data, and fuse multi-source information into a common operating picture. In addition, it will find, fix, track, and target low-flying cruise missiles and moving surface targets. The E-10A program and its Multi-Platform Radar Technology Insertion Program, in conjunction with other weapon system platforms, will give the Combatant Commander a seamless picture of the battlespace and an integrated defense against the cruise missile threat. This capability allows friendly forces to respond to time-sensitive opportunities with decisive force.

The Air Force has also emphasized the Persistent Ground Attack mission for the next-generation Joint Unmanned Combat Air System capability demonstration program. This system will undergo an operational assessment in the 2007 to 2010 time-frame.

We must also recapitalize our aging tanker aircraft fleet. Based on the completion of the KC-135 Recapitalization Analysis of Alternatives, the air refueling portion of the Mobility Capabilities Study, and the results of the Air Force Fleet Viability Board study, the Air Force anticipates Department of Defense direction to execute the KC-135 recapitalization program of record. This program will support both the 2005 National Defense Authorization Act, which authorized purchase of up to 100 tanker aircraft through a multi-year contract, and the 2004 Defense Appropriations Act that established a \$100 million tanker replacement transfer fund.

Capabilities-driven modernization and recapitalization efforts continue on space systems as well; as we modernize our critical constellations and capabilities across the spectrum of navigation, weather, communication, missile warning, launch, surveillance, and ground systems.

The Evolved Expendable Launch Vehicle (EELV) fields two launch designs to provide assured access to space for government systems. The Transformational Communications Satellite will employ Internet Protocol networks and high-bandwidth lasers in space to dramatically increase warfighter communications connectivity. Modernization of Global Positioning System (GPS) and development of the next-generation GPS III will enhance navigation capability and improve resistance to jamming. In partnership with NASA and the Department of Commerce, the Air Force is developing the National Polar-orbiting Operational Environmental Satellite System, which offers next-generation meteorological capability. We are well on the way to deployment of the Space-Based Infrared System, a transformational leap in capability over our aging Defense Support Program satellites. The Space Radar effort has been refocused on developing a system that meets the needs of both military and intelligence community users. Each of these systems support critical C<sup>4</sup>ISR capabilities that give the Joint Force Commander increased technological and asymmetric advantages.

Space superiority efforts are enabled by comprehensive space situation awareness (SSA) and defensive and offensive counterspace capabilities. Enhanced ground-based and new space-based SSA assets will provide the necessary information to gain and maintain space superiority. With respect to defensive counterspace, we maintain a diversified ground-based command and control network and are developing increased protection for our satellites and space-based services to ensure the capabilities are there in time of battle. We also recently fielded the counter-communications system to deny these same services to our adversaries. A well-balanced architecture will enable execution of an effective space superiority strategy.

Our Depot Maintenance Strategy and Master Plan calls for major transformation in financial and infrastructure capitalization. To support this plan, the Air Force increased funding in fiscal 2004–2009 for depot facilities and equipment modernization. We also began a significant push to require weapon system managers to establish their product support and depot maintenance programs early in the acquisition cycle, and to plan and program the necessary investment dollars required for capac-

ity and capability. Additionally, we are partnering with private industry to adopt technologies to meet capability requirements. The result—enhanced warfighter support.

Finally, improvements to our air and space systems will require improvements in our foundational support systems. Deteriorating airfields, hangars, waterlines, electrical networks, and air traffic control approach and landing systems are just some of the infrastructure elements needing immediate attention. Our investment strategy focuses on three simultaneous steps: disposing of excess facilities, sustaining our facilities and infrastructure, and establishing a sustainable investment program for future modernization.

#### *Expectation Management/Spiral Development/Systems Engineering*

To improve effectiveness in providing technology to the warfighter, we've enacted several new acquisition policies. Expectation management, spiral development, and renewed emphasis on systems engineering will eliminate technological surprises and reduce weapon system delivery cycle times.

Expectation management means better collaboration between the warfighting and acquisition communities during the life cycle of a weapon system. At least yearly, general officers from the major commands and acquisition community will formally review the cost, schedule, and performance of acquisition programs. Beginning with frank discussion about the “art of the possible,” these sessions will subsequently inform decision makers about the ramifications of evolving requirements and funding changes.

With a spiral development acquisition process, we expect to deliver a baseline combat capability to the warfighter faster than a process which focuses solely on a “100 percent solution.” This approach increases flexibility to respond to the ever-changing nature of external threats and resource fluctuations. Building on a solid systems engineering foundation, we expect to maximize improvements in communication and development strategy, paying dividends in transitioning technology to warfighting faster, and at reduced cost.

Systems engineering ensures that contractor-proposed solutions are both consistent with sound engineering principles and are spiral capable. It is the chief means by which we can hedge against technology risk. We must have the capability to proceed smoothly from one spiral development effort to the next, capturing as much capability as current technology and funding can produce. Under the direction of the Service Acquisition Executive, Milestone Decision Authorities will now review a program's proposed approach to systems engineering prior to approving Acquisition Strategy Plans. Indeed, systems engineering performance is so critical to our capability to transition technology to the warfighter that it is included among contractor incentives. Many of the above approaches are already in use.

In our space system acquisition, we will continue to emphasize the transition from “cost as the primary driver” to “mission success as the primary driver.” We will also continue to stress the importance of budgeting to the most probable cost—with realistic reserves—and the value of independent cost assessments, independent technical assessments, program assessments, and reviews. Maintaining sufficient reserves is essential to effectively executing these challenging National Security Space Programs.

#### *Transforming Business Process*

By leveraging the availability of global information, we are achieving significant operational advantages. All Air Force CONOPs rely heavily on critical information resources that are available “on the network” and delivered through a net-centric operating environment that is robust, secure, and available. To maintain information superiority, the Air Force must target a common infrastructure and fully leverage enterprise services and shared capabilities. To ensure the most efficient infrastructure, we are identifying enterprise-wide information resource solutions. These solutions are designed to deliver and implement efficiencies, which allow us to accelerate horizontal information integration, reduce information exchange barriers, reduce the total cost of information delivery, and shift resources to support warfighter operations and weapon system modernization.

For example, we reduced operating costs over the last two years by consolidating our networks and servers that provide Information Technology (IT) services. More importantly, networks are more stable with increased uptime and lower failure rates. We have improved our security with a better computer defense posture and are able to deploy patches and updates to the field quickly, resulting in fewer successful intrusions and denial of service incidents. In addition, the stand up of the Air Force Network Operations and Security Center will advance our consolidation

efforts and real-time monitoring of performance, configuration control, and security posture.

The GeoBase program provides standardized installation mapping and visualization support to Airmen through deployment of integrated aerial photography and geospatial data layers. These IT products support the joint warfighter common operating picture, minimize wasteful and potentially dangerous redundant data collection efforts, and enable cross-service situational awareness and decision-making capabilities.

IT Portfolio Management ensures IT investments align with Air Force priorities and produce measurable results. Annual Air Force-wide portfolio assessment ensures scarce resources are managed through the Capital Planning Investment Control processes: select, control, and evaluate. Senior leadership support of Portfolio Management enables the Air Force to gain greater visibility into resources from an IT enterprise perspective.

Likewise, we are transforming financial management by procuring and implementing a modern commercial-off-the-shelf accounting system that will produce accurate, reliable, and timely information. We are also streamlining and centralizing our customer service organizations and processes to invest more resources towards value-added demands while reducing the cost of transaction-oriented tasks. The result will be a smaller, but more efficient organization with enhanced financial management skills that can partner with stakeholders to make informed financial decisions based upon real-time information.

#### *Department of Defense Teleport Program*

The DOD Teleport program is the expansion of Defense Satellite Communications System's Standardized Tactical Entry Point (STEP) program. Teleport builds on the existing STEP program concept and was approved for initial development in 1998. Seven STEP sites have been selected to be upgraded to six Teleports: Defense Information Systems Network Northwest, Virginia; Fort Buckner, Japan; Wahiawa, Hawaii; Camp Roberts, California; Lago di Patria, Italy; and Ramstein Air Base/Landstuhl, Germany (combined Teleport site). Teleport extends services to the deployed user, providing secure and non-secure telephone service; secure and non-secure Internet Protocol routing; and video teleconferencing through worldwide satellite coverage between 65 degrees North and 65 degrees South latitudes. DOD Teleport provides these services through a variety of satellite communication systems, including the use of commercial satellites.

#### *Air and Space Operations Center Weapon System (AOC WS)*

The AOC WS is the focal point where command and control of all air and space power is harnessed to deliver combat effects to the warfighter. To make this center more effective, we made it a weapon system—and we man it and train like it's a weapon system: certified and standardized. We've injected the technology to increase machine-to-machine connectivity by developing the software and procedures to enable information fusion and accelerate the decider-to-shooter loop. We expect to have all five of our AOC weapon systems (known as Falcons) fully operational by fiscal 2006.

#### *Integrating Operations*

The Air Force provides a global presence and response capability for the National Military Strategy that gives warfighters timely and reliable access to all human, materiel and information resources. With our expeditionary approach to warfighting, we are relying more heavily on global operational support processes and extensive reachback—the ability to support overseas operations from stateside locations. We are modernizing these processes and related systems.

Key to this modernization is the establishment of common and interoperable capabilities such as a single Air Force Portal and data repository within the classified and unclassified domains. Over the past 18 months, we have designed and implemented the Global Combat Support System-Air Force program—a set of capabilities that support our vision and objectives. Using these capabilities, we have rapidly integrated legacy and newly developed applications and services, drawn information from global sources to provide a composite view of information, and eliminated the costly requirement for each program to purchase and support unique hardware and system software.

#### *Operational Support Modernization Program*

The Air Force's Operational Support (OS) transformation is a seven- to ten-year journey. By focusing on effectiveness and contribution to warfighting effects, we can identify the early steps in this transformation journey, and accelerate the delivery of changes that contribute to the core mission of the Air Force.

In May 2004, a Commanders' Integrated Product Team (CIPT) issued the Operational Support Modernization Program (OSMP) Flight Plan. The plan identified four OS critical processes—Deployment Management, Operational Response, Agile Sustainment, and Focused OS Command and Control. The plan identified three enablers of OS transformation—providing Shared Authoritative Data, executing an Integrated Workflow, and providing a Common Operational Support Picture.

Money has been set aside from fiscal 2005 to fiscal 2009 to fund modernization and transformation efforts under the Operational Support Modernization Initiatives (OSMI). This venture capital funding provides seed money for innovative ideas, allowing organizations to accelerate delivery of capabilities to the warfighter to improve effectiveness.

In 2004, the CIPT established organizations that have captured a significant portion of the operational support enterprise architecture; coordinated the OSMI-04 analysis and decision process; developed a draft version of the OS Concept of Operations for Business Modernization; and initiated a "Lean" reengineering process within the OS community while establishing the foundation for the cooperation and coordination of Business Modernization efforts among the Air Force Domains and major commands. The present Lean efforts focus on three OS critical processes: AEF Deployment Management, OS Command & Control, and Full Spectrum Threat Response, and are aimed at the needs of the warfighter.

In 2005, the CIPT expects to realize the initial benefits of the OSMP Flight Plan, including managing the OS processes and portfolio, fielding initial capabilities, beginning horizontal integration, increasing breadth of efforts, and engineering additional critical processes. Over the long term, CIPT hopes to institutionalize capabilities-based operational support.

OS modernization promotes Air Force-wide transformation efforts, ensuring a cross-functional, cross-major command, enterprise approach with the goal of a fast flexible, agile, horizontally integrated OS process and system infrastructure.

Likewise, warfighters and decision-makers are dependent on information generated and shared across networks worldwide. Successful provision of warfighting integration requires an enterprise approach of total information cycle activities including people, processes, and technology. To best leverage current and emerging technologies with warfighting operational and legal requirements, we are establishing a new organization in 2005, Networks & Warfighting Integration-Chief Information Officer (SAF/NWI-CIO). This new organization will absorb and consolidate the Deputy Chief of Staff for Warfighting Integration, Chief Information Officer, and Communications Directorate within the Secretariat. The organization will be led by an active duty lieutenant general.

Our logistics transformation provides a recent example of these transformation efforts. While current logistics operations are effective, sustainment costs are rising. In fiscal 2003, the Air Force spent over \$27.5 billion in operations and sustainment of weapon systems and support equipment. The costs will continue to escalate unless current logistics processes and associated information systems are improved.

The Expeditionary Logistics for the 21st Century (eLog21) Campaign is the Air Force's logistics transformation plan, and it is essential to our overall Air Force Transformation program. The eLog21 goals are straightforward: a 20 percent increase in equipment availability by 2009 and a 10 percent reduction of annual operations and support costs by fiscal 2011. The savings gained through eLog21 will provide the resources to support our warfighters by getting the right equipment to the right place, at the right time, and at the right price.

At the core of this effort is a comprehensive examination of the core processes used to support warfighters. A few years ago, Air Force Materiel Command began a comprehensive process improvement effort called "Lean" within our three Air Logistics Centers. "Lean" produced, and will continue to produce, substantial results. For example, Robins Air Force Base, Georgia, freed up 20,000 square feet of valuable industrial floor space to support expanded activities. We seek to expand this transformational approach to base level maintenance, installation support, and training activities.

There are many other facets of eLog21 that will leverage these improvements: expanding the regional repair concept we have employed in many deployed areas; streamlining the supply chain through better collaboration with vendors; using commodity councils that are responsible for managing the purchasing of weapon system components; and leveraging the power of information technology through enterprise resource planning, known as the Expeditionary Combat Support System.

Ultimately, eLog21 is about our people. The most important factor will be our ability to tap into the ideas and energy of the thousands of logisticians who keep our Air Force operating every day. It is not just a staff project or a new information technology. It is a team of Airmen developing new concepts in global mobility.

*Future Total Force*

As we move into the 21st century, the Air Force faces increasing modernization and recapitalization challenges, increasingly hard to define adversaries, and constrained budget realities. While we possess weapon systems to meet today's challenges and are investing in cutting edge technology and highly capable, highly trained personnel, we must make transformational changes to maximize the capability these advances provide. To accomplish this, the Air Force has developed a modified force structure and new organizational construct—the Future Total Force (FTF).

FTF provides the Air Force the capability and organizational flexibility to address the near-term challenges of aging systems and emerging missions. Furthermore, FTF will increase the Air Force's ability to deploy in support of combat while maintaining a credible force to continue necessary stateside training missions and Homeland Defense.

In the future, the Air Force will shift investment from "traditional" combat forces with single mission capabilities to multi-role forces, and aggressively divest itself of legacy systems. The result is a force structure with expanded capability to combat irregular, catastrophic, and disruptive threats, while maintaining the capability to combat "traditional" threats.

This smaller but more capable force will provide for modernization and recapitalization of selected weapon systems, allowing us to commit more resources to networked and integrated joint enablers. Overall, this modified force structure increases support to the joint warfighter. With more airlift and aerial refueling capability, more capable space constellations, persistent air-breathing ISR, and new ways to think about close air support, the future Air Force will provide more of the capabilities demanded by the joint force.

As part of this overall effort, the Air Force has developed an organizational construct that capitalizes on the inherent strengths of the Air Force's three components: the Active Duty, Air Force Reserve, and Air National Guard. In order to capitalize on these strengths, we based the FTF organizational construct on the successful associate model. Associate units are comprised of two or more components that are operationally integrated but whose chains of command remain separate.

Toward this vision, new organizational constructs will integrate Air Force Reserve and Air National Guard personnel with their Active Duty counterparts in virtually every facet of Air Force operations.

One of the key strengths of the Air Force Reserve and Air National Guard is higher personnel experience levels relative to Active Duty personnel. Increased integration will allow us to "rebalance" these experience levels, seasoning our Active Duty personnel through exposure to senior Reserve and Guard members. This also allows our Active Duty pilots to gain experience flying operational sorties while capitalizing on Reserve and Guard experience in an instructor capacity.

In addition to enhancing our efforts on the battlefield, Air Force Reserve and Air National Guard members give us unsurpassed tools to conduct Homeland Defense missions. While still involved in expeditionary operations, FTF will increase the role of the Reserve and Guard in emerging stateside missions—a perfect fit for our Citizen Airmen. These changes will not only improve our operational effectiveness, but will reduce reliance on involuntary mobilization, providing more stability for Citizen Airmen and their civilian employers.

The FTF, a modified force structure and new organizational construct, will give us the needed capabilities to meet future strategic challenges. Along with FTF, the Air Force has instituted initiatives in several key areas for the future.

*Science and Technology*

The Air Force is committed to providing the nation with the advanced air and space technologies required to protect our national security interests and ensure we remain on the cutting edge of system performance, flexibility, and affordability. Air Force Science and Technology (S&T) investments are focused on achieving the warfighting effects and capabilities required by the Air Force Concepts of Operations.

By focusing on the technologies we believe we will need in the next 10 to 25 years, we have made great strides in the information technology, battlefield air operations, space operations, directed energy, and sensors areas. We are pursuing key technologies, for example, sensors to identify concealed targets; automated information management systems essential to net-centric warfare; and countermeasures for Man-Portable Air Defense Systems.

One example, under development, is an integrated Surface Moving Target Indicator (SMTI) network composed of manned and unmanned air and space assets that will enable the Combatant Commander to remotely find, fix, track, target, and engage moving targets. Lessons learned from Operations DESERT STORM, ENDURING FREEDOM, and IRAQI FREEDOM reflect the growing importance of SMTI. This proven capability shortens the kill chain by providing the warfighter the ability to "put a cursor on the target." By linking future SMTI capability to find, fix, and track a moving target to the F/A-22 and F-35 capability to target and engage that same target, we achieve a transformational battlefield capability.

Other technologies, such as laser communications to increase data transfer rates or advanced micro air vehicles to provide persistent intelligence, surveillance, and reconnaissance, will increase future warfighting capabilities.

#### *Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance*

Our goal is to achieve joint horizontal Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C<sup>4</sup>ISR) integration and interoperability for the entire joint force. The vision is a seamless and ubiquitous network where space, air, and terrestrial assets have global machine-to-machine connectivity; where warfighters are armed with decision dominance, speed, and precision; and where weapon systems and platforms are "network-enabled."

#### *The Airborne Network for ConstellationNet*

The Air Force provides transportation layer components of the overall Department of Defense Global Information Grid under an effort we call ConstellationNet. The ConstellationNet is the information transport network (space, air, and ground) that allows a free flow of information rapidly accessible and presented to warfighters at the right time and right place to create the Combatant Commander's desired effects. The key to achieving information superiority is developing a robust space and air network that provides connectivity to network enabled platforms, fused intelligence, and real-time command and control. We are building the architecture and infrastructure that connects these platforms, creating a network in the sky.

The space and air network will leverage evolving technologies and bring about the network-centric operations capabilities of Internet Protocol-based networks to overcome the current challenge of making the information exchange between platforms completely interoperable without degrading performance. These new technology standards and protocols will be incorporated through programs like the Joint Tactical Radio System, the Transformational Communications Satellite System, and the Global Information Grid-Bandwidth Expansion.

#### *The Ground Network for ConstellationNet*

The Combat Information Transport System (CITS) provides the Air Force ground segment of the ConstellationNet. CITS is structured into three components. The first is the communications transport component, which delivers high-speed and high-capacity network backbone capability for the distribution of voice, video, data, sensor, and multimedia information inside the base campus, as well as the gateway off the base to the Defense Information Systems Network and Global Information Grid Bandwidth Expansion locations. The second component is Net Battle Management. This component provides the capability to Air Force Network Operations and Security Centers (NOSCs) to centrally command and control the Air Force ConstellationNet across space, air, and ground information transport domains. To command and control the network, the NOSCs must have the ability to control the flow, routing, and traffic priorities of information based on mission requirements. Additionally, they must have the ability to grant and deny access to the network based on mission need and threat to the Global Information Grid. This leads to the third component of CITS, Net Defense. The Net Defense component integrates and fields information assurance capabilities across the ground component, to prevent unauthorized access to ConstellationNet.

The Air Force envisions machine-to-machine communication between platforms, manned and unmanned, on the ground, in the air, and in space. To command and control these interactions, the Air Force has initiated an effort called Warfighting Headquarters.

#### *Warfighting Headquarters*

We are transforming our command and control structure by establishing new Warfighting Headquarters (WFHQ), positioned globally, and replacing our old Cold War structures to provide the Joint Force Commander with the most effective means to command and control air and space forces in support of National Security objectives. This new standing command structure consists of the Commander of Air

Force Forces (COMAFFOR), the COMAFFOR's personal and special staffs, and the Air Force Forces functional staff. These forces will be organized and resourced to plan and deliver air and space power in support of U.S. and Unified Combatant Commander (UCC) strategies at a core capability level on a daily basis, further easing the transition from peacetime to wartime operations. The WFHQs are also structured to assume responsibilities immediately as the Combined or Joint Force Air Component Commander, and with the appropriate augmentation from the UCC, could assume the role as a Joint Task Force headquarters. The Warfighting Headquarters will also leverage the increased capabilities developed through Joint Warfighting Space.

#### *Joint Warfighting Space*

The Air Force is intensifying its focus on operationally responsive space—the ability to rapidly employ responsive spacelift vehicles and satellites and deliver space-based capabilities whenever and wherever needed. The first step in achieving a global Operationally Responsive Space capability is the Joint Warfighting Space (JWS) concept. JWS will provide dedicated, responsive space capabilities and effects to the Joint Force Commander in support of national security objectives. The concept seeks immediate and near-term initial operating capabilities to meet pressing Joint Force Commander needs, and a Full Operational Capability beyond 2010. Additionally, the Air Force envisions that JWS system capabilities will evolve as technology advances and the needs of the theater commander change.

In the near-term, JWS will exploit existing off-the-shelf technologies from each Service. It will enhance and incorporate space capabilities in joint training and exercises, increase space integration in the AEF, and allow the Joint Force Commander to take advantage of the many synergies provided by multi-service space professionals. Lessons learned from JWS in exercises and crisis employment will initiate changes to space doctrine and help the Air Force, fellow Services, and joint community develop innovative space-derived effects.

As technologies mature, JWS will bring the Joint Force Commander enhanced, dedicated capabilities that eliminate gaps in present-day space operations. The long-term plan envisions a fully capable expeditionary force, ready and responsive to theater warfighters' needs at the operational and tactical levels of war.

When fully operational, the JWS capability will deliver responsive near space (i.e., the area above the earth from 65,000 to 325,000 feet altitude) and on-orbit capabilities to directly support the Joint Force Commander. If required, JWS squadrons could deploy from stateside to operate near space assets or integrate JWS capabilities into theater operations.

#### *Improving Close Air Support and Battlefield Airmen*

To increase its rapid strike capabilities in the close battlefield, the Air Force is examining new ways to improve upon its joint close air support (JCAS) mission, as well as implementing a way to better train personnel for the employment of air and space power.

By combining the payload, long-loiter, and high-altitude capacity of bombers with precision munitions, improved command and control, and precise targeting, we have expanded our ability to conduct CAS. Performing CAS at high altitude with great precision and persistence is a major advancement in joint operations with land forces. Using laser and Global Positioning System-guided bombs such as the Joint Direct Attack Munition (JDAM), and with direct communications with a ground controller, a variety of aircraft are able to drop large numbers of JDAMs very close to friendly troops, destroying the enemy with massive, yet tailored, firepower. This capability provides day/night and all-weather support to ground forces.

Today, primarily fighter and bomber aircraft, like the A-10, B-52, and F-16, conduct CAS. As these aircraft begin to reach the end of their service lives, F-35A Conventional Takeoff and Landing (CTOL) and F-35B Short Takeoff and Vertical Landing (STOVL) variants will become the Air Force's workhorses for CAS and other missions.

The F-35B STOVL variant offers a capability to operate with advancing U.S. Army, Marine, and Special Operations forces in a non-linear, dynamic battlefield. In addition, the F-35B will have commonality and interoperability with F-35s operated by other Services and Allies, facilitating Joint and Coalition operations.

Additionally, Tactical Air Control Party Modernization Program improvements are transforming close air support control from reliance on voice communications during day/good weather conditions to digital/video and night/all-weather capability. The Remote Operations Video Enhanced Receiver kit provides real-time video from remotely piloted aircraft and other video transmitters. It includes computers, software, and data link operations, and can transmit targeting information as well as

formatted and free-hand messages. Laser range-finders and laser designators provide the ability to take full advantage of precision and near-precision munitions. Quickly and accurately identifying and relaying target information not only makes our forces safer by allowing engagement of enemy forces in minimum time, but also reduces the risk of engaging the wrong target.

*Long-Range Strike*

To further refine its rapid strike capabilities, the Air Force is transitioning its Long-Range Strike strategy to focus on effects instead of platforms. We view long-range strike as the capability to achieve the desired effects rapidly and/or persistently on any target set in any environment anywhere at anytime. The Air Force is responsible for conducting long-range strike missions as part of the Global Strike Concept of Operations. Our forces must be responsive to multiple Combatant Commanders simultaneously and able to strike any point on the planet.

Today, we provide deep strike capabilities through a variety of platforms and weapons. Future capabilities must continue to enhance the effectiveness of the system. Responsive capabilities combine speed and stealth with payload to strike hardened, deeply buried, or mobile targets, deep in enemy territory, in adverse weather, with survivable persistence in the battlespace.

*Special Operations Forces*

We are emphasizing the unique effect produced by the synergy of Special Operations Forces (SOF) and rapid strike, and evolving requirements for SOF in the Global War on Terrorism. As part of meeting these new mission sets, we will continue to work in an increasingly joint environment with our sister service SOF units, and in concert with U.S. Special Operations Command. Our SOF units will enhance Army operations concepts resulting in a wider dispersion of ground forces across the battlefield.

New mobility platforms such as the CV-22 Osprey and the Advanced Air Force Special Operations Forces Mobility Platform will add a new dimension in the ability to conduct SOF operations. Additionally, the F/A-22 will be a key enabler of forward operational access for joint forces. The Raptor will use its stealth and supercruise capabilities to support SOF and other maneuver elements deep in enemy territory, in what would otherwise be denied airspace.

Closely related is the need to rapidly recover and extract personnel. We have begun the Personnel Recovery Vehicle Program, seeking to achieve initial operational capability in fiscal 2013 and replace the aging HH-60 combat search and rescue aircraft.

We will continue to leverage our highly trained, highly motivated SOF personnel and develop technologies to devise a smaller, harder-hitting, faster-reacting, highly survivable force that maximizes the element of strategic and tactical surprise to defeat America's current and potential adversaries.

SUMMARY—ON COURSE FOR THE FUTURE

The Air Force of the future makes the whole team better. Built around the 2025 Force and its accompanying organizational construct, the Future Total Force, the Air Force will be a more capable, smaller force. As such, the future Air Force increases the capability and flexibility of the joint force—and, subsequently, increases options for the Secretary of Defense and the President. These military options will be crucial to the defense of the nation as the United States continues to wage the GWOT while transforming and strengthening the joint force for any future contingency.

The Air Force offers an unparalleled set of combat capabilities to directly influence any joint or interagency operation, as well as the enabling capabilities to improve joint warfighting capabilities on the ground, on or under the sea, and in the air and space. Recognizing that no Service, or even DOD, can achieve success by itself, the Air Force has focused on increasing the integration and effectiveness of the joint force and interagency team.

To achieve new levels of integration and effectiveness, the Air Force will take advantage of the United States' long-held command of the global commons—air, sea, space, and cyberspace. The Air Force intends to extend its current air and space power advantage. As part of the joint force, the Air Force is positioned to leverage its persistent C<sup>4</sup>ISR, global mobility, and rapid strike to help win the GWOT, strengthen joint warfighting capabilities, and transform the joint force—while minimizing risk.

To accomplish this requires focused investment in our people, science, and technology, and recapitalization of our aging aircraft and weapon systems.

As threats change and America's interests evolve, we will continue to adapt and remain the world's premier air and space force. Together with our fellow Services, we stand resolute, committed to defending the United States and defeating our enemies.

Senator STEVENS. General Jumper.

General JUMPER. Mr. Chairman, Senator Inouye, Members, it's a pleasure to share this table this morning with Mr. Dominguez, and I want to second my support for the priorities that Mr. Dominguez has laid out this morning. My comments this morning will be very brief.

#### RECRUITING AND RETENTION

Today, we have 28,000 airmen deployed, working the issues that confront us around the world. Six thousand of those are from the Air National Guard and the Air Force Reserve; and 2,000 of that 6,000 are volunteers. We are making our recruiting goals in almost every category, and our retention goals, also, in almost every category. And we enjoy great support from our Air National Guard and our Air Force Reserve of the missions of the United States Air Force.

#### FLYING OPERATIONS

We're flying about 150 sorties a day over Iraq, and about 75 sorties a day over Afghanistan every day. These missions include close-air support and surveillance missions. We have Predator—multiple Predator orbits up, doing surveillance for the forces on the ground; a very significant airlift effort, both the strategic airlift that comes across the oceans to resupply our forces and the tactical airlift that flies within the theater every day. A significant tanker effort, that is required to keep the airplanes from all of the services in the fight, takes place every day and goes largely unsung as our mobility force participates in Operation Iraqi Freedom. In the midst of all of this, we responded to the tsunami with more than 18 million pounds of relief supplies that were delivered in the tsunami effort in and around Indonesia to relieve the beleaguered people there. Overall, over 300,000 sorties this past year in our efforts around the world.

#### RECAPITALIZING FORCE STRUCTURE

I share Mr. Dominguez's grave concern, and put the highest priority on recapitalizing our force. As an example, our tanker force and our—portions of our C-130 fleet are over 40 years old, and we are already seeing about 2,000 of the 6,000 airplanes in the United States Air Force are under some sort of a flight restriction, mainly due to aging considerations. We need to put emphasis on this. And, again, I share Mr. Dominguez's priority to put emphasis on recapitalizing our fleet.

#### VISITING AIRMEN AROUND THE WORLD

And, finally, Mr. Chairman, you know the great people that are out there. And let me just tell you how important it is when you and members of this subcommittee, which you have all done, travel over to the area of responsibility (AOR) to visit our people. Believe me, they notice, and they—and I hear about it—and they appre-

ciate that visible sign of support, when you all come and see them in action. It lets them know that the people back home do, indeed, support them. So I thank you for all your personal efforts to go make yourself visible to the forces that are, indeed, engaged around the world.

I look forward to your questions, sir.

Senator STEVENS. Thank you, sir. And thank you both for your brief statement.

I'm going to yield to Senator Inouye. We have a vote that's going to start at 10 o'clock, and then we have to go join the House for a joint session, starting at about 10:25, so this hearing will end about 10 minutes after 10.

I yield to you, my friend and co-chairman.

#### STATEMENT OF SENATOR DANIEL K. INOUYE

Senator INOUYE. I thank you very much, Mr. Chairman.

I have a prepared statement. I ask that it be made part of the record.

[The statement follows:]

#### PREPARED STATEMENT OF SENATOR DANIEL K. INOUYE

Mr. Chairman, I join you in welcoming our representatives from the Air Force. General Jumper, Secretary Dominguez we thank you for being here today.

As the President's request was being formulated this winter, word of many changes started to crop up in the press, such as terminating the C-130, and canceling the F-22.

As we review the actual budget we see that many of these issues are really recommendations that would occur in future budgets.

For example, this budget includes funding to purchase the F-22, and while it does not include funding for Air Force C-130's, it does fund the Marine Corps C-130 tanker.

Nonetheless, the decisions to truncate plans for the F-22 and C-130 are controversial matters that we will need to understand. We would expect that today's hearing would provide a forum to address these issues.

Mr. Secretary, the Air Force is to be commended for its support of Operation Noble Eagle here at home, and Operations Enduring Freedom and Iraqi Freedom overseas.

We know that the Air Force has provided great support for our ground forces in theater, using your tremendous airlift, reconnaissance, and fighter aircraft.

In addition, what many people may be surprised to learn is that there are approximately 2,600 airmen and women in Iraq in direct support of the Army and marines serving as truck drivers, security guards and combat engineers.

Mr. Secretary, General Jumper, in our hearings with the Army, Navy and marines I have expressed my concern about recruiting and retention. The other services are experiencing difficulties recruiting or retaining personnel. At this moment, the Air Force has the opposite problem, you have more military personnel than you can afford. So, I hope you will address this matter today to explain how the Air Force can be exceeding its personnel goals while the other services are having shortfalls.

Gentlemen, we sincerely appreciate all that you and the men and women in your service are doing for our Nation. We cannot be more grateful for the sacrifices that you make every day.

Mr. Chairman, I thank you for calling this hearing and I await the testimony of our witnesses.

Senator INOUYE. I want to point out that most Americans don't realize that you have about 2,600 men and women in Iraq, airmen and airwomen, driving trucks, doing combat engineer work, traffic, the jobs that other people do, like the Army or the Marines. And I want to commend you for pitching in to help the other services.

Second, As you know, General, at this time, all services, with the exception of one, are having problems on recruiting and retention. You have a problem of your own. You've got too many of them.

General JUMPER. Yes, sir.

Senator INOUE. We'd like to get some explanation on how you're able to achieve all of that. Naturally, as I've pointed out in the past, I'm concerned about the plans you have for C-130s and the F/A-22s. These are—matters, I believe, which are not only of concern for Hawaii and Alaska, but for the whole Nation, and, for that matter, for the security of this globe.

So I thank you very much for the service that all of you have rendered in Operation Iraqi Freedom and Enduring Freedom and Noble Eagle. Great job, sir.

General JUMPER. Thank you very much, sir. I appreciate that very much.

Senator STEVENS. Senator Leahy.

Senator LEAHY. Thank you, Mr. Chairman. I know time is short. I just want to welcome General Jumper and Secretary Dominguez to the subcommittee. I felt fortunate that I've spent a great deal of time with both of them. I think I even made their staff nervous because of the amount of time it took in my office with them yesterday. I spent the time because of the great respect I have for General Jumper's leadership. And, Mr. Secretary, I'm glad you're here. I've known General Jumper for some time, and I greatly admire him and his leadership team. I know they face some significant shortfalls—\$3 billion in operations and maintenance, almost \$750 million in personnel costs. I know we've always tried to work together in a bipartisan way to help them on these budgets, Mr. Chairman, and I pledge to work with you and Senator Inouye on that. But I just wanted to compliment them. If we don't have time for questions, I'll submit it for the record.

General JUMPER. Thank you, sir.

#### MILITARY PERSONNEL END STRENGTH MANAGEMENT

Senator STEVENS. Thank you very much. You both have mentioned the fact that you're, sort of, utilizing attrition to meet your top line, as far as personnel is concerned. Tell us about that. You expect to go down to October—is that what you said, Mr. Secretary?—and then start recruiting? Our figures show that you're pretty much above your end-strength level authorized right now.

Mr. DOMINGUEZ. Senator, we're—right now, at the end of March, we're about 3,000 airmen over our authorized end strength. That's the place we're supposed to be September 30. So we are in very comfortable territory. It's within the margin, now, of the wiggle room authorized by the Congress, plus or minus 3 percent of our end strength.

We've been working the problem pretty aggressively for a couple of years. Of course, the biggest gains were the ones that we resisted having to make, and that's taking a very steep nosedive in our recruiting in fiscal year 2005, which we have, but we are recruiting. We are recruiting to our most critical shortfall skills. And we figured we could do that with a 1-year holiday. But we need, in fiscal year 2006, to return back to a normal recruiting year about 30,000 active component airmen, and that is the plan.

Now, in addition to dealing with accessions to get to our end strength, we've been doing some pretty aggressive things to try and entice people to leave us when they're in overage skills. We've implemented career job reservation, where, if you're in an overage skill, you have to retrain into a shortage skill when you re-enlist. So these are all difficult kinds of things. We didn't like doing them, but we were obligated to do so.

I want to highlight, one thing that we are trying to do is that we've worked in close partnership with the Army. Anyone in the Air Force who wants to move into the Army and continue their service there, we have a program called "Blue to Green" to help facilitate that movement.

#### RECRUITING

General JUMPER. We essentially cut our recruiting in half for this fiscal year, sir. And, essentially, from October to February, we essentially shut down recruiting. We picked it up again in February and are trying to work our way back into normal recruiting. But that's the step, the major step, we took to meet our end strength problem.

Senator STEVENS. Thank you very much.

Let me state, for the members here, we have 20 minutes left of this hearing. The vote will start at 10 o'clock. Let me yield each of you 5 minutes, and then we'll see what happens with the last 5 minutes, whether someone else comes in.

Senator Inouye is recognized for 5 minutes.

Senator INOUYE. Mr. Secretary and General, I'd just like to make a note and reflect upon history. When the B-2 was planned, we had planned for, I believe, 132. And, at that time, I believe the B-2 was going to cost us about \$350 million per aircraft. In order to cut costs, so they were told, we cut it down to 21, and each B-2 cost around \$2 billion. I see something like that happening to the F/A-22. Would something like that happen again, sir?

General JUMPER. Go ahead.

#### AIRCRAFT ACQUISITION

Mr. DOMINGUEZ. Senator, we may be poised on that, and that's certainly part of the discussion that we're going to have with Secretary Rumsfeld and his team through the summer in the Quadrennial Defense Review (QDR). But, largely, the up-front investment costs of building that airplane are sunk. If you—to buy the airplanes that were taken out of the budget in this latest round—costs about \$10 billion for 100 airplanes. That's about \$100 million a copy for the product. And legacy airplanes, the F-15E, if you were going to buy another one of those today, you'd be in the \$90 to \$100 million range, as well. So the sunk-cost argument is something we have to be really careful to explain.

#### QUADRENNIAL DEFENSE REVIEW

General JUMPER. We've got to make sure, sir, that, as we go into the Quadrennial Defense Review—I don't think that there's an argument about the capability of the airplane; it's going to be an argument—not an argument—it's going to be a discussion about the

numbers of airplanes. And that's a relevant discussion. And the Secretary of Defense said we would have that discussion. And, hopefully, we'll be able to amortize all this investment we've had over the correct number of airplanes when we finish the Quadrennial Defense Review.

Senator INOUYE. I wish you the best, sir.

General JUMPER. Thank you, sir.

Senator INOUYE. We'll do whatever we can.

The other matter that concerns me is the C-130J termination plans. I've been told that it may cost an extra billion dollars. Is there any truth to that?

#### C-130J PROGRAM

Mr. DOMINGUEZ. Sir, what is accurate today is that the costs estimated for termination of the C-130J multiyear that are in the President's budget were underestimated. We know that, absolutely. The Secretary of Defense has acknowledged that. And his Office of Program Analysis and Evaluation is, right now, re-looking at that, trying to get a handle on what—the more accurate figure of the costs of terminating the multiyear. The Secretary has committed to providing that information to the Congress, if not by the end of this month, certainly in the early part of May, before you're deep into your markup of the 2006 budget.

General JUMPER. And we also think, Senator, that, as the mobility requirements study is completed by the end of this month, that the mobility capabilities study will help inform the Office of the Secretary of Defense (OSD) and the Secretary of Defense on the proper steps to take for the C-130J multiyear contract.

Senator INOUYE. And I think the study will show that the C-130J is needed. Am I correct?

General JUMPER. Sir, I haven't seen the study, but if I look at the world out there that we live in today, certainly there's great demand for the C-130. And, as you well know, the C-130s in the Air Force that we have today, many of them are facing groundings because of wing cracks. So that requirement, I see—personally, as I see it, is growing.

Senator INOUYE. Thank you very much, Mr. Chairman.

Senator STEVENS. Senator Domenici is recognized for 5 minutes.

Senator DOMENICI. Thank you very much, Mr. Chairman.

#### FUTURE AIRSPACE AND TRAINING RANGES

General, I want to talk a little bit about airspace for the future. It's my understanding the Air Combat Command has 10 training ranges across the United States. These ranges support different types of aircraft and targets, and allow for live-ordnance delivery. These ranges and the airspace are critical, as I understand it, to the training of our Nation's premier aircraft. I believe it's less likely that new sources of airspace will be available for the Department of Defense in the future. In addition, recapitalizing tactical air assets with the Joint Strike Fighter (JSF) and with the F-22 will place greater demands on the need, as I understand it, for quality ranges. Is that correct?

General JUMPER. Sir, that's absolutely correct.

Senator DOMENICI. Do you share my view that airspace for the Air Force will be at a premium in the future?

General JUMPER. I do, indeed, sir.

Senator DOMENICI. All right. Why is it important that the Air Force of the future control large training ranges and the associated airspace?

General JUMPER. Well, sir, the very speed of the airplanes and the standoff distances of our weapons dictate ever-increasing demands for airspace in an environment where that airspace is decreasing. So, if you take, for instance, an F/A-22 that can supercruise at 1.5 Mach, or a small-diameter bomb that, when released, can glide out 65 miles to its target, those parameters are much different than anything we've seen with legacy airplanes in the past.

Senator DOMENICI. And we hear a lot about training without having to do actual missions and actual in-the-field training, but do you believe that live, realistic training aircraft, like the JSF, will be critical to the combat success of those kind of airplanes?

General JUMPER. We'll never be able to substitute for all of live training. There's no doubt about it. Certainly, distributed mission training and distributed mission operations will allow us to have our aircrews train with certain types of platforms that are hard to get into the training environment, especially surveillance platforms. And we'll do that in a distributed way.

There will be some training with next-generation munitions that we'll do in a simulator environment. But, in the end, you can never substitute—and, as a matter of fact, the great leverage that our airmen have is training, and the great leverage that we have over other air forces in the world is our ability to go out and do this live training, as you described.

Senator DOMENICI. Well, I would assume, with all that, that it will be difficult to go out and obtain new facilities, new airspace, new ranges to do this. Is that correct, General?

General JUMPER. Absolutely, sir.

Senator DOMENICI. I look out in the West, and I don't see where you'll get them.

General JUMPER. Yes, sir.

Senator DOMENICI. Is that a—

General JUMPER. It's going to be—

Senator DOMENICI [continuing]. Fair statement?

General JUMPER [continuing]. It's going to be very difficult to get more than we have, yes, sir.

Senator DOMENICI. And will not the JSF, which is a higher-performance aircraft as compared with the F-16—will it not need supersonic ranges for it—to complete its overland training?

General JUMPER. Sir, to a lesser extent than the F/A-22, but, yes, similar to the F-16. But, still, that makes that supersonic airspace very precious.

Senator DOMENICI. And why is it important that they be able to train at supersonic?

General JUMPER. Well, sir, you can't—in the modern airplane, quite frankly, and you're in the middle of a fight, you don't know when you've gone supersonic. So, if you're having to pay attention to your airspeed indicator all the time to make sure that you don't create that sonic boom and disturb the people on the ground, whose

support we need, then you're paying attention to artificialities that you don't want to be—have in your habit patterns.

Senator DOMENICI. So the same thing would be true as you train. General JUMPER. Precisely, sir.

Senator DOMENICI. Thank you very much.

Senator STEVENS. Thank you.

Senator Leahy.

Senator LEAHY. Thank you. Thanks, Mr. Chairman.

#### COMMUNITY BASING INITIATIVE

General Jumper, we discussed this somewhat yesterday, but the Air Force has currently launched an important community basing initiative with the 158th Fighter Wing in the National Guard. I'm well aware of it, because the 158th is in my home State of Vermont. You're going to station active duty personnel at Guard bases to work alongside their counterparts. I think it's an excellent idea. It's going to allow the regular Air Force to draw on the Guard's knowledge and expertise, and vice versa. The F-16 pilots that are maintained at the Vermont Guard have an incredible amount of experience. They are, of course, the ones who flew cover over New York City after 9/11 around the clock for some considerable period of time.

My understanding is that 12 Air Force personnel will be coming to Vermont. We could accommodate an active duty associate unit of at least 200 pilots and maintenance personnel. I know a lot of other Guard units, very good Guard units around—across the country could do that. Where do you see this going? I know this is something you're looking at not just for today, but where we are 3 years and 5 years down the road. Where do you see it going?

General JUMPER. Sir, Mr. Dominguez has been in the personnel business in our Air Force before he became the Acting Secretary, and he and the rest of us have been very involved in making sure that the Air National Guard participates in the missions that are in demand of our Air Force, as the active duty also transforms itself—so, missions such as, not only the flying mission, but space, information warfare, unmanned air vehicles, et cetera. We want the Air National Guard and the Air Force Reserve to participate in all of those.

We also want to make sure that, wherever we can, we have the active and the Air National Guard working together. And this is the case in the community basing idea, which we are looking very much forward to testing, beginning this summer when all of our people arrive.

I've told you that the Chief Master Sergeant of the Air Force has been up to visit that unit, and his report was absolutely outstanding. I have every confidence that this experiment will be a success, and we'll look for other similar opportunities to either grow this capability or put it elsewhere. And I have a feeling that this model will be in demand in several other places. So, it's a very good model, sir.

#### FUTURE TOTAL FORCE

Senator LEAHY. I have sort of a corollary question. I see, in the Air Force's future total force, a disproportionate number of tactical

airplanes in the Guard being retired. And I'm just wondering if we're, on the one hand, working with the Guard, but, on the other hand, cutting back their ability to carry out this integral part. And I'm not just singling out the Air Force; I think everybody throughout the military command are going to hear this question, whether it's the Army or the Navy or whatever, because of the huge contribution the Guard's been making in the last 3 years in all these branches.

General JUMPER. Sir, our full intention is to bring the Guard along with us. And, as you know, we have an associate Guard relationship at Langley Air Force Base, Virginia, which will be the first F/A-22 unit with the Air National Guard unit in Richmond, Virginia. So, our intention is to, as I said before, bring the Air National Guard into the main mission stream, continue them into the main mission stream, as they have been.

In the plans that we have, there is absolutely no intention to bring down the end strength of the Air National Guard. So, if there are cuts in personnel, those cuts will come out of the active duty force.

With regard to the aircraft, we are simply trying to align the hardware in the Air Force where the demands for the missions exist. And we are doing that in full collaboration with the National Guard. We have National Guard members on the team that are working these issues. They are in the Pentagon with us every single day working these issues.

So, I think it's with full visibility, sir, that we're trying to do the right thing as our missions transform in the Air Force.

Senator LEAHY. Well, General, if you, and, Mr. Secretary, if you, as this goes on, can you periodically give briefings to my staff. I would really appreciate it. Thank you.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you, Senator.

Senator Dorgan is recognized for 5 minutes.

Senator DORGAN. Mr. Secretary and General, thank you very much.

General, I understand this may well be the last time you will appear before the Appropriations Committee as Chief.

General JUMPER. Yes, sir.

Senator DORGAN. And let me just tell you that, from my standpoint, I think you've done an outstanding job. I've appreciate working with you. I think you've always been straight with this subcommittee, and we appreciate your service.

General JUMPER. That's very kind, sir, thank you.

#### BASE REALIGNMENT AND CLOSURE

Senator DORGAN. Let me ask you about Base Realignment and Closure (BRAC), base closing. What kind of excess capacity have you indicated to the Secretary of Defense exists in the Air Force? How much, and what kind of excess capacity?

General JUMPER. Sir, what we did in the BRAC process was lay out our military requirements. And in the military requirements that have to do with range space and the necessity to distribute ourselves properly around the United States to be postured for various contingencies, either homeland contingencies or deployment

contingencies, we've laid out those requirements, which then go into an analytical process.

So, sir, we, quite frankly, have not taken this as a base-by-base issue. It's an overall requirements issue. And to keep this process completely clean, I have absolutely stayed away from any consideration of base-by-base matters.

Senator DORGAN. General, I understand that. That wasn't what—

General JUMPER. Yes.

Senator DORGAN [continuing]. I was trying to get at. My question was, there have been—all of us, on this subcommittee, I think, have read assessments that there's 20 percent excess capacity here or there, or 15 percent or 25 percent, it's in this area or that area. And that's the set of information that gave rise to a BRAC.

General JUMPER. Right.

Senator DORGAN. So I assume, coming from each of the services, and all of the services, the notion of how much excess capacity they had was a stimulant for the Department of Defense (DOD) requesting a BRAC round. And I guess, I'm trying to evaluate, not with respect to individual bases—

General JUMPER. Right.

Senator DORGAN [continuing]. Or major installations—

General JUMPER. Right.

Senator DORGAN [continuing]. What kind of excess capacity do you think, or did you recommend, exist at this point?

General JUMPER. We weren't asked the question exactly that way, but if I give you my estimate, it was about 20 percent. Now, that's just for the Air Force. As this goes into consideration, joint usage comes into the equation, too. So that 20 percent may become less as joint utilization options also are considered.

Senator DORGAN. Are there categories in which that 20 percent exists relative to other categories, such as, in some areas they talk about training, and other areas as having substantial—or depots having excess capacity?

General JUMPER. Um—

Senator DORGAN. Do you recall—

General JUMPER [continuing]. Sir, I don't want to try—I don't want to be overly specific here, because I'm not exactly sure. It's not just training; it would be training and education, for instance.

Senator DORGAN. Right.

General JUMPER. So the categories are parsed out, the way I understand it, and I don't want to sit here and quote what the categories are, because I'm not sure I'd get it right. But, if you don't mind, I'd take that for the record, if that's okay with you—

Senator DORGAN. That's fine.

General JUMPER [continuing]. And get that to you.

[The information follows:]

#### BRAC EXCESS CAPACITY CATEGORIES

The Air Force analyzed infrastructure capacity in terms of installation categories, more specifically a set of installations identified as "major installations." A parametric analytical technique was used which provided a rough measure of excess capacity. The results of this methodology provide a credible assessment of aggregate excess capacity.

The Air Force identified nine categories of supporting infrastructure needed to support its current and future force structure. The categories and aggregate excess capacity numbers are broken down as follows: Administrative: 31 percent; Air Force Reserve: 36 percent; Air National Guard: 34 percent; Depots: None; Education and Training: 45 percent (classroom space), 12 percent (ramp & supporting facilities); Missiles & Large Aircraft: 27 percent; Small Aircraft: 16 percent; Space Operations: 35 percent; and Labs Test Centers etc.: 18 percent.

This and a more detailed description may be found in the Report to Congress on Base Realignment and Closure 2005, dated March 22, 2004.

Mr. DOMINGUEZ. Senator, if I might, the answers to those questions are in the analysis that General Jumper described and these are rough-order-of-magnitude estimates, but the details are being worked now.

Senator DORGAN. Right.

Mr. DOMINGUEZ. And so, the answers are still forthcoming, sir.

Senator DORGAN. Well, there will be no small amount of interest in all of these issues, in virtually every office here on Capitol Hill.

#### AGING TANKER FLEET

Let me ask about tankers. In recent years, General, you have come to us to talk about the aging tanker fleet and the urgency with which that we deal with that. As you know, we've proceeded with the 767 issue. That's gotten snarled in a number of different ways. And so, the question is, Does the urgency still exist? If so, where do you think we are? And I don't see—at this point, we don't have, I think, a mechanism underway to try to find a way around this. So give us your assessment of the tanker-fleet situation.

General JUMPER. Sir, I think that we are—we'll await the outcome of the analysis of alternatives, which is formally being done now, and expect to see the results of that in the summertime. As soon as that analysis of alternatives is complete, then we'll have a path ahead to start a formal acquisition program. The urgency of recapitalizing the tanker fleet, I think, grows every day, and my concern is if I lose sleep over one thing at night, it's about the aging aircraft problem and the corrosion problems we have, and it's especially in our tanker fleet. So, I think that we will step out with all urgency, once we see the analysis of alternatives, to get a formal program underway, with all the provisions of the acquisition process that have been a concern with the formal proposal.

Senator DORGAN. Mr. Chairman, I will just conclude by saying, I think of significant interest to all of us, as well, is the issue of the Air Guard and the—

General JUMPER. Yes, sir.

Senator DORGAN [continuing]. F-16s and all the related issues of the Air Guard.

General JUMPER. Yes, sir.

Senator DORGAN. And I want you, always, when you go to bed, to remember the Happy Hooligans, who have—as you know, have won the William Tell Trophy more than once and are, I think, the best fighter pilots in the Air Force.

General JUMPER. They're hard to forget, sir.

Senator DORGAN. Well, again, General, you've done a first-rate job, and thank you very much for being here.

General JUMPER. Very kind.

Senator DORGAN. Mr. Secretary, thank you.

Senator STEVENS. Thank you all for your brevity.

F/A-22 PROGRAM

On the F/A-22, it's got a similar problem now, as I see it. Am I wrong? We have a proposed reduction in procurement of the F/A-22, and that's going to have some change in terms of future investment and cost. What is the future operational impact of this request to reduce the investment in the F/A-22 this year?

General JUMPER. Sir, I think that if the number is, indeed, reduced, as the proposal exists today, then we will be returning with a request for something to fill in for those capabilities.

Our proposal right now, if we lay out the Air Force requirement, I would ask for about 380 F/A-22s that would replace between 800 and 900 legacy airplanes. If we can't get to that number, or if the number is significantly less than that, then we'll have to come back and ask to fill in some of those blanks with legacy airplanes. And, as I pointed out earlier, I think those legacy airplanes will cost just about as much as an F/A-22.

Mr. DOMINGUEZ. Senator, if I might, that exact question is a thing that we'll be wrestling with through this summer in the Quadrennial Defense Review, because they're going to be looking at the air dominance problem and what's the best way to get to air dominance and sustain it.

Senator STEVENS. Well, that suggestion—really a request—to reduce the investment that is in this budget is not being too well received on Capitol Hill—what worries me is that we're going to be faced with a demand to maintain the previous level of procurement of F/A-22 and there have to be adjustments elsewhere in the budget. Have you looked at that, the two of you? Where if we have a vote that requires us to increase the rate of procurement of the F/A-22 in 2006, what's that going to do to the balance of the budget?

Mr. DOMINGUEZ. Sir, I don't believe—

Senator STEVENS. It's 2008, she tells me. It's—

Mr. DOMINGUEZ. Yes, sir.

Senator STEVENS [continuing]. 2008.

Mr. DOMINGUEZ. This is not a problem for the Congress in the fiscal year 2006 appropriation. It is something we will wrestle with—the program was terminated by Program Budget Decision 753 in 2008, so this is a problem we must wrestle with this summer, and we'll be communicating with you shortly after that, sir.

Senator STEVENS. These suggestions we're having—we're receiving from other members to try to eliminate that impact in 2008, do you think that's premature?

Mr. DOMINGUEZ. I don't—I'm not aware of any decision you're being asked to make this year, in this President's budget, that will prejudice the issue, one way or the other.

General JUMPER. And I think, Senator, considering this in the Quadrennial Defense Review, as the Secretary of Defense has promised, is the correct thing to do, and I think we'll be able to answer these questions in plenty of time to affect a decision that now doesn't impact us until 2008.

Senator STEVENS. When's that due, General?

General JUMPER. Well, it's due—the whole thing is due out next February, but I think the major part of the work that's going to go

into the Quadrennial Defense Review is going to be done this summer, and results will be forthcoming from that this summer.

Senator STEVENS. Senator Cochran, we have 9 minutes left on that vote, I'm told.

Senator COCHRAN. Mr. Chairman, I appreciate the recognition.

I wanted to just congratulate General Jumper and the leadership of the Air Force on the fine job they're doing in helping us protect the security of our country. You have a lot of competing interests and demands for equipment, materiels, funding, generally. It's a tough year to make choices and to try to assign priorities. But I look forward to working with them and with you and Senator Inouye in helping to support the effort to be sure we get it right and that we fund those activities that are important for our security needs.

I just would put my statement in the record, with your permission. And, under the constraints we have for voting on the floor, thank you for recognizing me.

[The statement follows:]

PREPARED STATEMENT OF SENATOR THAD COCHRAN

Mr. Chairman, I am pleased to join you in welcoming these two distinguished leaders of the Department of the Air Force.

I commend the outstanding efforts demonstrated each day by our airmen. The country has come to expect air dominance in all military conflicts, and our reliance on space assets is significant and steadily increasing. The total Air Force, the active duty, Guard, and Reserve, is playing a pivotal role in the Global War on Terror, and not just in operations in Iraq and Afghanistan. We also appreciate your homeland defense mission, which includes daily patrols over United States airspace.

I thank you both for your leadership, and for the service of the women and men you represent. I look forward to your testimony.

Senator STEVENS. Thank you, Mr. Chairman. Thank you for coming by.

General Jumper, you reflect well upon the education received at the Anchorage High School.

General JUMPER. Thank you, sir.

Senator STEVENS. I want to tell you that your many friends wish you well—

General JUMPER. Thank you, sir.

Senator STEVENS [continuing]. As you go through this final year. And I, personally, look forward to being with you, General.

ADDITIONAL COMMITTEE QUESTIONS

Secretary Dominguez, we're pleased to have you here with us for the first time.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing.]

QUESTIONS SUBMITTED TO MICHAEL L. DOMINGUEZ

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

FUTURE TOTAL FORCE

*Question.* Mr. Secretary, I am advised that as part of the Department of Defense's transformation of its military forces, the U.S. Air Force is developing an initiative known as "Future Total Force (FTF)," which focuses on accelerated reductions of legacy weapons systems and the procurement of newer weapons systems. Consider-

ering that many of the legacy weapons systems are found at Air National Guard and the Air Force Reserve units, would you please describe in detail the impact of "Future Total Force" on these entities?

**Answer.** The traditional mix of Air National Guard, Air Force Reserve and Active component aircraft has served the nation well in the context of legacy platforms and traditional threats. However, as we move into the 21st century, the Air Force faces increasing modernization and recapitalization challenges, an adversary increasingly hard to define, and strained budget realities. While we possess weapon systems to meet today's challenges and are investing in cutting edge technology and highly capable, highly trained personnel, we must make transformational changes to maximize the capability these advances give us. One way we will do this is through the Future Total Force (FTF).

The FTF concept will enable the Air Force to meet the challenge of ensuring a sustainable 20-year strategic vision. Through the use of innovative organizational constructs such as associate units, we seek to be better able to match the skills of our highly experienced Air Reserve Component (ARC) personnel with our fewer, but more capable, cutting edge weapon systems. This fundamentally changes an old paradigm of putting Guard and Reserve in "hand-me down" systems and instead puts them in front line systems with decades of relevancy. This new force structure focuses on programs, forces and technology, as well as new organizational concepts that strive to fundamentally improve the effectiveness of our Active Duty, Guard and Reserve personnel and systems. Ultimately, FTF is designed to provide the means for the Air Force to improve its overall combat capabilities and continue to be a primary enabler in joint operations.

In addition, the FTF vision does not mean taking flying missions away from the Air National Guard without a viable, meaningful mission to replace it. In fact, FTF will guarantee that both the Air Force Reserve and Air National Guard are full partners as new weapons systems like the F/A-22 and Joint Strike Fighter come on line. In addition, our reserve components will be key players as we adopt emerging technologies to fight the fight of the future, allowing them to be involved in these exciting new missions, yet taking advantage of the "reachback" these missions provide, minimizing the need for disruptive mobilizations.

**Question.** Under "Future Total Force," what aircraft will be retired and under what timeframe?

**Answer.** Future Total Force (FTF) is a fundamental element of Air Force transformation. Comprised of two major components, 2025 Force Structure and innovative organizational constructs, FTF will create efficiencies, retain valuable human capital, and above all, increase the combat capability across all Air Force components. Specifically, this effort will divest the oldest and least capable aircraft in our inventory, including the A-10, F-16, F-117, and older F-15 models. The drawdown of some of these aircraft begins in fiscal year 2007 and continues through 2025. A recapitalized force consisting of F/A-22s, F-35s, and unmanned combat aerial vehicles (UCAVs) will replace legacy fighters, whose average age today is more than 17 years.

**Question.** What safeguards are in place to ensure that while the Air Force is reducing the current legacy aircraft inventory, it is not also undermining the country's ability to protect itself from multiple airborne threats?

**Answer.** In order to face uncertain threats of the future, the Air Force must pursue aggressive divestiture of aging aircraft that are increasingly expensive to operate, deliver less capability and experience higher attrition rates. To determine the best course of action, the Air Force Studies and Analysis Agency (AFSAA) ran a variety of defense planning scenarios (with threats determined externally by the Central Intelligence Agency, Defense Intelligence Agency, etc.) against 14 force structure models. AFSAA determined the optimal force structure, called the Future Total Force, requires retirement of aging aircraft, primarily older model F-16s, C-130s and KC-135s. From a business case perspective, the savings realized through this divestiture are critical if we are to move into high-tech emerging missions that will make the Air Force more relevant to the joint warfighter well into the 21st century.

Because these emerging mission areas will provide an exponential increase in capability, we will need the additional manpower and capability resident in our Air National Guard and Air Force Reserve to get the most "bang for our buck." Using innovative organizational constructs, members of the Active Duty, Guard and Reserve will work side-by-side at unprecedented levels to achieve the crew ratios these highly capable platforms demand.

Homeland Defense is the most vital mission responsibility of the U.S. Air Force, and for that reason, the Air Force looked very closely at what capabilities are and will be required for that mission. Those capabilities requirements were identified and separated out of the mix so as not to be jeopardized throughout the FTF anal-

ysis process. In other words, at no time will the capabilities requirements necessary to provide homeland defense be vulnerable to divestments or reorganization efforts.

It is important to point out that exempting the capabilities required for homeland defense does not necessarily isolate a particular unit or installation from divestments or reorganization efforts. There are many considerations that will help determine which units and installations will be selected for FTF implementation, but primary among these will be the impact on the Air Force's ability to provide homeland security.

The FTF is a twenty-year plan. It will evolve over time and will in fact enhance the Air Force's ability to protect the homeland.

*Question.* Does "Future Total Force" seek to reduce Air National Guard personnel authorization? Could the accelerated pace of retiring Air National Guard aircraft leave units and personnel without missions?

*Answer.* The Future Total Force (FTF) Plan does not seek to reduce Air National Guard (ANG) personnel end strength. In order to face uncertain threats of the future, the Air Force must pursue aggressive divestiture of aging aircraft that are increasingly expensive to operate, deliver less capability and experience higher attrition rates. To determine the best course of action, the Air Force Studies and Analysis Agency (AFSAA) ran a variety of defense planning scenarios (with threats determined externally by the CIA, DIA, etc.) against 14 force structure models. AFSAA determined the optimal force structure, called the Future Total Force, requires retirement of aging aircraft, primarily older model F-16s, C-130s and KC-135s. From a business case perspective, the savings realized through this divestiture are critical if we are to move into high-tech emerging missions that will make the Air Force more relevant to the joint warfighter well into the 21st century.

Because these emerging mission areas will provide an exponential increase in capability, we will need the additional manpower and capability resident in our Air National Guard (ANG) and Air Force Reserve to get the most "bang for our buck." And, as I have stated, ANG end strength will remain constant. Using innovative organizational constructs, members of the Active Duty, Guard and Reserve will work side-by-side at unprecedented levels to achieve the crew ratios these highly capable platforms demand.

There is a common misperception that because the predominant number of older model F-16s reside in Guard units that these units will be left without a mission until they receive new, emerging missions, or that they will lose their mission altogether. Nothing could be further from the truth. The Air Force needs the experience and capability that resides in the Guard and Reserve. Without it, we would be unable to meet the needs of the Nation. Members of the Guard and Reserve will be a part of all new weapons systems from their inception. In fact, we are in the process of standing up a new associate relationship between the Air National Guard and the Active Duty at Langley AFB, Virginia flying the F/A-22.

Once basing decisions are made under Base Realignment And Closure (BRAC), we plan to implement force structure plans through a redistribution of airframes as well as the stand-up of new and exciting emerging missions. Air National Guard end strength will be preserved. An ANG unit may lose older model F-16s, but may get another weapon system, even a newer airframe of the same model. Please be assured that we will work with the National Guard Bureau to make any ANG unit transition, if deemed necessary, as smooth as possible.

*Question.* Has the Air Force examined alternatives to modernizing some current systems in the event that funding and procurement of new weapons systems are delayed?

*Answer.* Modernizing and extending the service life of our aging legacy fighter force will not replace the vital transformational capabilities of the F/A-22 and the F-35. Tactical aircraft force structure trades and capability mix considerations are currently being studied in the Department's ongoing Quadrennial Defense Review Joint Air Dominance Study Analysis. Results of this study will determine modernization needs of our legacy fighter fleet.

*Question.* Has the "Future Total Force" initiative been presented to the Adjutants General so that the total impact on the Air National Guard (ANG) can be adequately assessed and reasonable alternatives can be developed that allow the Air Force to modernize while, at the same time, maintain an appropriate balance of Air National Guard assets so the Guard can continue to accomplish its air sovereignty mission?

*Answer.* The Future Total Force (FTF) Plan has been communicated to The Adjutant Generals (TAGs) through a variety of venues and means. First, both the Secretary and the Vice Chief of Staff have spoken at TAG meetings. Second, the TAGs have two colonel-level representative's working in the Air Force FTF office, as well as a full-time representative from the Guard Bureau. The Air Force convened a

General Officer Steering Committee to oversee FTF actions; there are three Adjutants General who sit on that Committee.

The Air Force Directorate of Plans and Programs recently hosted a classified meeting with the TAGs to share the entire Force Structure Plan and to answer any questions the TAGs may have. Furthermore, the ANG's Future Total Force office is working in lock step with the HQ USAF FTF office, including attendance at Air Force/FTF staff meetings. The Air Force will continue to work with both the Air Force Reserve and the Air National Guard as we make decisions regarding the Air Force's future.

Homeland defense, to include air sovereignty, is the most vital mission responsibility of the United States Air Force, and for that reason, the Air Force looked very closely at what capabilities are and will be required for that mission. Those capabilities requirements were identified and separated out of the mix so as not to be jeopardized throughout the FTF analysis process. In other words, at no time will the capabilities requirements necessary to provide homeland defense be vulnerable to divestments or reorganization efforts.

*Question.* Mr. Secretary, in representing a state where the Army and Air National Guard Forces represent, by far, the most significant military presence, it is my very strong hope that transformation can be accomplished without undermining National Guard personnel and its assets. Please respond for the record what you will do to make sure that the Guard's interests are represented in this process.

*Answer.* The Future Total Force (FTF) Plan has in fact been communicated to The Adjutant Generals (TAGs) through a variety of venues and means. First, both the Secretary and the Vice Chief of Staff have spoken at TAG meetings. Second, the TAGs have two colonel-level representative's working in the Air Force FTF office, as well as a full-time representative from the Guard Bureau. The Air Force convened a General Officer Steering Committee to oversee FTF actions; there are three Adjutants General who sit on that Committee.

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#### QUESTIONS SUBMITTED TO GENERAL JOHN P. JUMPER

##### QUESTIONS SUBMITTED BY SENATOR TED STEVENS

###### PERSONNEL STRUCTURE

*Question.* As the Air Force continues to transform to meet the challenges of today and the future, what is your plan to shape and balance the personnel structure in the Air Force?

*Answer.* The Air Force's ongoing Force Shaping program is still on track to "right size" the Active Duty end strength to the congressionally mandated level of 359,700 Airmen by the end of fiscal year 2005. We were able to successfully draw down approximately 22,000 Airmen in excess skills predominantly by waiving service commitments, reducing accessions, and allowing transfers to the "Total Force" (through PALACE CHASE) and to the Army ("Blue-to-Green").

As the Air Force returns to authorized end strength, we will continue "right shaping" efforts by providing relief to overstressed career fields through recruiting, retention, and retraining initiatives. We have focused fiscal year 2005 recruiting efforts towards the 58 most critical combat and combat support specialties. Additionally, where we are experiencing shortfalls, we have targeted our bonus programs in order to retain our Airmen. Finally, we have restarted our Career Job Reservation program and implemented a robust retraining program migrating excess Airmen to shortage career fields.

However, as the Air Force corrects our active skill imbalances by realigning manpower and expanding training pipelines, the Total Force, to include our civilian workforce and the Air Reserve Component (ARC), will play a critical role in rebalancing the force for the future. We will continue initiatives that produce greater efficiencies through military-to-civilian conversions and competitive sourcing. Additionally, with the Guard and Reserve volunteers providing greater participation in our air expeditionary packages, we will take appropriate "right shaping" steps to ensure long-term health of both our Active Duty and ARC forces. As we move forward, we will constantly review our Active/ARC mix across all of our mission areas.

## PROGRAM MANAGEMENT

*Question.* Space is very important for our national security. We seem to be experiencing cost growth problems in some of our space programs. What steps is the Air Force taking to improve program management and to control costs of our important space programs?

Answer. The Department has reorganized to vest many space responsibilities and authorities with one individual. We continue to refine the space acquisition decision-making process. One change is the creation of National Security Space (NSS) Acquisition Policy 03-01. Hallmarks of NSS 03-01 include: OSD-led independent cost estimates at each key decision point and build approval, increased attention on technology maturation, requirements documentation advanced earlier in the program cycle, acquisition phases aligned with key design reviews, and an emphasis on management reserve as key to acquisition success.

We find ourselves trying to manage programs in the non-recurring research and development field where the government program manager has inadequate reserve to apply to problems as they occur. As a result, problems that occur in the development phase of some of our very complex satellite systems take months before help is on the way in the form of additional resources to solve problems. In those months, those problems have festered and gotten worse. We can do better as a community working with Congress to give some flexibility to government program managers that are developing these complex systems. One of the features is an ability to maintain a reserve that can be applied to a problem without months of delay.

We still need to make improvements in our program management processes. While we have confidence in the overall skills and experience in our personnel, we need to establish processes that will improve our ability to manage our programs in this environment. Therefore, significant efforts are underway to identify and develop Space Professionals, particularly within the acquisition corps. The System Program Director (SPD)/Program Manager (PM), as the leader of the Government-Contractor team for a program, must be accountable and have the authority to accomplish the program's objectives and meet the user's needs. The Air Force recognizes that improving program management is critical for bringing program costs under control, and that such effective program management must include both contractor and Government program managers at all levels within their respective organizations. Further, these managers must be empowered to make not just the routine but also the controversial decisions based on timely, accurate, and complete information. We are also addressing continuity by instituting controlled tours for SPDs/PMs at Space and Missile Systems Center (SMC). Another aspect of growing our team of space professionals is continuing to improve system engineering training and discipline. The formation of SMC's Systems Engineering Center is a positive first step that we need to continue to cultivate in order to grow our cadre of experienced space systems engineers.

The NSS 03-01 policy documents several principles important to controlling and managing costs of our space systems. First is using mission success as the primary driver when assessing risks and trades among cost, schedule and performance. Mission success drives risk management, test planning, system engineering and funding profiles. The second principle centers on credibility. The NSS process is meant to encourage incentives and foster quality decision making for programs that exhibit necessary maturity to proceed into the next acquisition phase. The third principle, cost realism, is key in that the cost estimating capability shall be independent and accomplished in a timely, realistic, and complete manner. Finally, the new Joint Capabilities Integration and Development System (JCIDS) process helps program managers address cost growth driven by uncontrolled requirements growth by taking steps to ensure stability and predictability in identifying requirements for the acquisition community. To ensure warfighter input prior to firming up design concepts, NSS 03-01 requires a Joint Requirements Oversight Council-approved Initial Capability Development Document (CDD) prior to entering the concept development phase. A refined CDD is required prior to commencement of the preliminary design phase.

Although we have the ability to generate good cost estimates today, we need to merge this with better schedule estimating to come up with better phasing of near-year estimates. The nature of our transformational space programs means that problems that are common to all acquisitions are significantly greater due to their degree of complexity. We need to ensure that program managers get good data as early as possible to make informed decisions.

While cost estimating is not an exact science, we've put in place a system to ensure past experience and solid costing methods are used and will lead to realistic cost numbers. The Independent Cost Estimate (ICE) is effective in giving the pro-

gram's milestone decision authority (MDA) a comprehensive estimate. All elements of cost are considered when deciding when or if to proceed with a space system. The ICE is a requirement for each Defense Space Acquisition Board (DSAB) meeting when the MDA approves the program's entrance into the next phase of the space acquisition process. We will continue to apply rigor in budgeting to the ICE, with the goal of securing additional management reserve to plan for the unforeseen issues that are certain to arise.

#### SPACE RADAR

*Question.* Last year, the Appropriations Conference report expressed concern over the ability of the Space Radar (formerly the Space Based Radar) program to attain its goal of "global persistent surveillance" and whether the system is affordable. What changes has the Air Force implemented to make this a viable and affordable program?

*Answer.* We have formulated and revised our fiscal year 2005 funding plan and redirected our prime contractors to comply with last year's Congressional language.

We plan to achieve a militarily significant level of global persistent surveillance through horizontal integration with other Intelligence, Surveillance, and Reconnaissance (ISR) platforms and target characterization technologies. Horizontal integration allows us to tip and cue targets of interest to air and space ISR platforms passing "target custody" to the best situated collector to satisfy the mission. In addition, when other ISR platforms are not available, we can use target characterization to re-identify targets in subsequent Space Radar (SR) satellite passes over an area of responsibility. The number of satellites required to support this "custody" Concept of Operation (CONOP) for persistence is significantly fewer than that required for a tracking CONOP, consequently reducing overall program costs while delivering equivalent utility to DOD and intelligence community users.

In addition, in order to improve affordability, we have made major program changes such as the establishment of SR as a single acquisition program that would satisfy both the DOD and Intelligence Community needs. This single shared system would eliminate the need for two programs or funding lines, thereby eliminating duplication of costs. Another fundamental change was to increase the focus on developing the Electronically Steered Array and other advanced technologies as part of an overall risk reduction framework culminating in an on-orbit demonstration to reduce technical and cost uncertainties. An Independent Technology Assessment Panel was also formed to explore concepts that could dramatically affect the SR cost-benefit equation. Results of this effort are due summer of fiscal year 2005. We are also evaluating architecture options concentrating on reuse of existing infrastructure to minimize SR ground investment costs.

Over the span of five months, we ensured that contract modifications were in place that would shift the majority of funding to risk reduction efforts. The implementation of these efforts is intended to address the fiscal year 2005 Congressional language and their culmination will lead to a more affordable SR architecture.

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#### QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

#### TACTICAL AIR TRAFFIC CONTROL

*Question.* The Air Force and the Air National Guard have the critical mission of air traffic control in operational theaters. These airmen perform a difficult mission. However, the equipment the air traffic controllers use was developed long before many of them were born. Could you describe the efforts the Air Force is taking to modernize tactical air traffic control systems for the Air Force and the Air Guard?

*Answer.* The Air Force is modernizing Air Force and Air National Guard tactical air traffic control (ATC) systems by acquiring a new mobile air traffic control radar known as the Mobile Approach Control System (MACS). MACS will replace the Air Force's 1970's vintage TPN-19 and the Air National Guard's 1960's vintage MPN-14K analog radar systems. Due to their advanced age, the TPN-19 and MPN-14K have many obsolete components. The difficulty in obtaining replacement parts has made these aging systems difficult and expensive to maintain and has resulted in operational availability rates of only 70-85 percent, far short of the 98 percent availability standard. MACS will be easier and less costly to deploy, requiring only three C-130s to airlift it versus seven for the TPN-19 and MPN-14K. The digital systems in MACS will allow it to share radar information with other ATC and non-ATC systems, a capability not provided by the currently fielded systems. This could enhance our ability to provide the type of en route ATC we found we needed in Afghanistan and Iraq.

*Question.* The Air Force and the Air National Guard have the critical mission of air traffic control in operational theaters. These airmen perform a difficult mission. However, the equipment the air traffic controllers' use was developed long before many of them were born. Is the Air Force capable of meeting the combatant commanders' tactical air traffic control needs with the current arcane system?

*Answer.* Although the Air Force has not lost any missions due to air traffic control, our maintenance downtime is significant and we have been fortunate to have relatively good weather when our systems have needed repair. The current Air Force and Air National Guard systems are operational 70–85 percent of the time, while the benchmark goal is for them to be available at least 98 percent of the time.

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QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

UNMANNED AERIAL VEHICLES (UAVS)

*Question.* I have been advised that the Department of Defense (DOD) is considering designating the Air Force as the DOD Executive Agent for unmanned aerial vehicles (UAVs). Why do you believe Executive Agency is necessary? And why is the Air Force the best candidate to take control of UAVs?

*Answer.* The United States Air Force (USAF) is not in a position to speak for the Office of the Secretary of Defense (OSD), the agency with responsibility of determining the requirement for any Executive Agency's establishment. The USAF would, however, welcome the synchronization and harmonization of UAV efforts across DOD that should result from OSD's establishment of a UAV Executive Agent. Of the Services, the USAF is in the unique position of possessing the necessary airspace, intelligence, and aviation frequency management experience necessary to coordinate and synchronize UAVs across the Joint Force. No other Service has as much expertise in coordinating the use of airspace and air-developed Intelligence, Surveillance & Reconnaissance in peacetime and warfare to support the Soldier, Marine, Sailor, and Airman from foxhole to near space and beyond.

*Question.* How does the warfighter benefit from this effort to take UAV work away from one Service and consolidate it with a Service with less experience?

*Answer.* Should the Office of the Secretary of Defense decide to create a UAV Executive Agent, the warfighter will benefit from the resulting synchronization and integration of UAV systems and the effects they create on the joint battlefield. Rather than seen as moving UAV work between Services, Executive Agency is more properly framed as coordination and synchronization of air assets and the effects they generate, regardless of type and size, to produce the capabilities required by the Joint Force today and far into the future. Thus an Executive Agent would aid but not subsume the work of any Service by coordinating efforts across the DOD in areas such as airspace management and the collection and distribution of UAV generated information.

*Question.* Setting up a single authority for all Service UAVs is the unmanned equivalent of establishing an Executive Agent for all manned aircraft. How do you justify this?

*Answer.* Today, we find ourselves in circumstances similar to the early development of manned flight, a debate over aviation-produced effects on the battlefield. Experience and debate over time has created an imprecise and often overlapping synchronization of aviation roles and missions across the Services. Currently, we are in the infancy of UAV development; each Service is rapidly expanding the role UAVs play in contributing to joint warfighting capabilities. UAVs, like all aircraft, pose the capability of operating and creating effects at all levels of warfare, often simultaneously, regardless of size or Service affiliation. Projected DOD budgets and rapidly increasing UAV's capabilities mean that the coordination of UAV roles and missions within the DOD will become increasingly necessary in the future. The designation of one agent to ensure the DOD does not squander its resources by creating unnecessarily redundant capabilities early in the history of UAVs will head off much of the debate and duplication of effort which has resulted from the service-centric development of manned aircraft.

*Question.* What percent of tactical UAVs are currently being employed by the Air Force in theater?

*Answer.* Tactical UAV is defined as anything smaller than a Predator. Currently, the Air Force has 53 percent of our Air Force Special Operations Command (AFSOC) and Security Forces small tactical UAVs supporting the Global War on Terrorism (GWOT). Specifically, AFSOC has 22 of 54 (41 percent) systems and Security Forces has 17 of 20 (85 percent) systems in support of the GWOT.

*Question.* Your staff provided my office with no statistics on flight hours for Air Force “small UAVs.” We were told the “Air Force does not keep these types of statistics for its small UAVs.” How can you defend the decision to make the Air Force Executive Agent over tactical UAVs when you don’t even log the minuscule amount of flight hours for your own tactical UAVs?

*Answer.* The Office of the Secretary of Defense (OSD) is currently defining what a UAV Executive Agent’s role would be in the event one is designated. The designation of specific UAVs as tactical—operational—or strategic is artificial. In many cases the designation small and large is also ambiguous, since size may improperly characterize the impact of the capability the UAV provides. However, the Air Force does capture flying hour costs associated with tactical UAVs considered Major Weapons Systems (MWS) such as Predator. Funding for “small” tactical UAVs, which are not designated as MWS aircraft, are captured at the unit-level due to their very low operational costs. All Services are moving toward what is envisioned, as a net-centric form of warfare where information developed from any source is available to everyone with access to the network. This means that UAVs of every sort and size will be providing information to the Global Information Grid. The United States Air Force (USAF) has the preponderance of experience within the DOD in management of airspace and the collection and distribution of air generated information. Debate over UAV Executive Agency is more properly framed as coordination and synchronization of air assets and the effects they generate, regardless of type and size, to produce the capabilities required by the Joint Force today and far into the future. The USAF is the Service with the most experience in managing airspace and the collection and distribution of air generated information. The USAF stands ready to perform the Executive Agency role if called upon by OSD.

*Question.* Without flight information, doesn’t this basically mean you don’t even know how, where, and when your own UAVs are flying?

*Answer.* The lack of flight information referenced in this question is not well defined. In the past, the management of UAVs was not like that of fixed wing aircraft. One of the lessons learned from the unexpected proliferation of UAVs is the need to, in some but not all cases, coordinate UAVs like fixed and rotary wing aircraft. Operationally, several UAV aircraft fly above the coordination altitude on a battlefield and all are tracked at the Joint Force Air Component Commander’s Air Operations Center. They are flown in accordance with the Air Tasking Order, providing visibility and accountability on how, where, when and why they are flown. Backpack UAVs, on the other hand, are designed to be launched and controlled by personnel engaging in a fluid tactical environment, and are de-conflicted in most cases by flying below the coordination altitude. Taking into account the limited capability of these smaller UAVs and the nascent stage of net-centric warfare, current airspace coordination procedures do not require the Services to specifically track how, when, and where backpack UAVs are flying. Requiring tactical users to integrate their use on the battlefield below the required airspace coordination altitude would currently place an undue burden on the Soldiers, Airmen, Marines, and Sailors operating them. In the future, the proliferation of these UAVs on the battlefield, and their increasing payload capabilities, may require coordination and monitoring within, and across, all the Services and Agencies engaged in joint warfare.

#### FUTURE TOTAL FORCE

*Question.* Future Total Force (FTF), as currently proposed by the Air Force, presents a significant challenge to our citizen-airmen because it disproportionately impacts the Air National Guard. Currently, the Air National Guard maintains at least one flying unit in every state. This structure is a vital component to homeland defense.

How do you propose securing our homeland or responding to a major disaster when no units are available to our Governors because FTF has removed them?

*Answer.* Homeland defense is the most vital mission responsibility of the United States Air Force, and for that reason, the Air Force looked very closely at what capabilities are and will be required for that mission. Those capabilities requirements were identified and separated out of the mix so as not to be jeopardized throughout the FTF analysis process. In other words, at no time will the capabilities requirements necessary to provide homeland defense be vulnerable to divestments or reorganization efforts.

It is important to point out that exempting the capabilities required for homeland defense does not necessarily isolate a particular unit or installation from divestments or reorganization efforts. There are many considerations that will help determine which units and installations will be selected for FTF implementation, but pri-

mary among these will be the impact on the Air Force's ability to provide homeland security.

The FTF is a twenty-year plan. It will evolve over time and will in fact enhance the Air Force's ability to protect the homeland.

*Question.* Under the Future Total Force plan, there appears to be a significant time lapse between when airframes are removed from a unit, and when that same unit would receive a follow-on mission. What do you propose to do with those air-men in that timeframe?

*Answer.* First, a little background on the Air Force's effort to meet the concurrent challenges of increasingly complex threats to our national security and budget pressures, two issues with which you are very familiar. Last year, Congress asked the Secretary of Defense to submit a 20-year Force Structure Plan. Based on two assumptions: (1) the capabilities required for the future and (2) the anticipated levels of funding for the Department of Defense. After a significant two-year internal Air Force debate (including full participation from the Air National Guard and Air Force Reserve at many points along the development process), the Air Force submitted its proposed plan for the Future Total Force (FTF). This plan recommended divesting the oldest and least capable aircraft in our inventory. These older and less capable aircraft are predominately located in Air National Guard units.

It is important to note that simply identifying the oldest platforms for divestment does not mean there won't be other platforms that will "roll-down" to replace the current systems. Discussions to this effect have been ongoing during the Base Realignment and Closure (BRAC) deliberation process. However, these deliberations, by law, cannot be made public until recommendations are given to the BRAC committee in May of 2005. The planned divestment of aircraft will happen over a 20-year timeframe. If we are going to eliminate a particular mission and it is replaced with another mission, we will time that transition so as to avoid a costly lag period that would leave a unit without a mission. In short, we will ensure that units have a meaningful mission to meet the needs of the Nation. In addition, analysis included the very important requirements of the Homeland Defense missions and other State roles performed by our Air National Guard units.

*Question.* Recruitment for the National Guard is down. Would you agree that removing units from states, therefore forcing Guardsmen to travel long distances for drill weekends, will only hurt recruitment?

*Answer.* Yes. Recruiting is currently down in the Air National Guard, specifically non-prior service (NPS) recruiting. Currently, only meeting 65 percent of NPS goal to date.

We do understand that removing units from states will not only affect recruiting, but retention as well. As we transition through Future Total Force and Base Realignment And Closure, we will be asking our members to move, retrain into another career field, or leave earlier than expected. We do anticipate some unexpected losses, thus having to recruit to these losses. However, we must move forward with these transitions to new missions to not only remain relevant, but to also support the war fighter of the future.

Our plan to combat this potential problem is to use all the personnel force management tools available, to include incentives, transition authorities, and training opportunities. Additionally, leadership will undoubtedly play a large role in the transition to new missions. We will continue to take great care of our members, as we have in the past. We have always had one of the best retention rates and plan to keep it that way.

*Question.* Recruitment for the National Guard is down. Do you have any plan as to how you will combat this problem?

*Answer.* Yes. Recruiting is currently down in the Air National Guard, specifically non-prior service (NPS) recruiting. Currently, only meeting 65 percent of NPS goal to date.

We do understand that removing units from states will not only affect recruiting, but retention as well. For example, prior to the move of the 126th Air Refueling Wing (ARW) from Chicago, Illinois to Scott Air Force Base, Illinois, their unit end strength was 104.2 percent. After we moved the unit, their end strength dropped to 83.3 percent. Over 25 percent of the 126th ARW personnel were lost due to the move. It took five years to return the end strength of the unit to previous levels.

As we transition through Future Total Force and Base Realignment And Closure, we will be asking our members to move, retrain into another career field, or leave earlier than expected. We do anticipate some unexpected losses, thus having to recruit to these losses. However, we must move forward with these transitions to new missions to not only remain relevant, but to also support the war fighter of the future.

Our plan to combat this potential problem is to use all the personnel force management tools available, to include incentives, transition authorities, storefront recruiters, and training opportunities. Additionally, leadership will undoubtedly play a large role in the transition to new missions. We will continue to take great care of our members, as we have in the past. We have always had one of the best retention rates and plan to keep it that way.

*Question.* It is my understanding that the Guard will lose 60 percent of their airframes due to the newer F-22 and JSF coming on-line. In the past, both the Air Force and Guard leadership have stated that due to FTF, end strength won't be reduced. However, if there are fewer planes, and therefore less airtime for the same amount of Guard personnel, what will these Guardsmen be doing?

*Answer.* First, a little background on the Air Force's effort to meet the concurrent challenges of increasingly complex threats to our national security and budget pressures, two issues with which you are very familiar. Last year, Congress asked the Secretary of Defense to submit a 20-year Force Structure Plan. Based on two assumptions: (1) the capabilities required for the future and (2) the anticipated levels of funding for the Department of Defense.

After a significant two-year internal Air Force debate (including full participation from the Air National Guard and Air Force Reserve at many points along the development process), the Air Force submitted its proposed plan for the Future Total Force (FTF). This plan recommended divesting the oldest and least capable aircraft in our inventory. These older and less capable aircraft are predominately located in Air National Guard units. Again, our Force Structure Plan does not specifically identify who would have responsibility for the particular equipment under a specific organizational construct, or where the remaining aircraft will be based. It is important to note that simply identifying the oldest platforms for divestment does not mean there won't be other platforms that will "roll-down" to replace the current systems. Discussions to this effect have been ongoing during the Base Realignment And Closure (BRAC) deliberation process.

The planned divestment of aircraft will happen over a 20-year timeframe. If we are going to eliminate a particular mission and it is replaced with another mission, we will time that transition so as to avoid a costly lag period that would leave a unit without a mission. In short, we will ensure that units have a meaningful mission to meet the needs of the Nation. In addition, analysis included the very important requirements of the Homeland Defense missions and other State roles performed by our Air National Guard units.

Another aspect of the FTF plan is to increase the "association" of all three Components—Active, Guard and Reserve, in order to produce the most effective organizations and preserve the benefits of the highly experienced Guard and Reserve personnel. One example is the Chief of Staff of the Air Force FTF Test Initiative at Langley Air Force Base where the Virginia Air National Guard's 192nd Fighter Wing will begin to fly the F/A-22 at the same time as the Active Duty in an Associate Unit arrangement with the 1st Fighter Wing. This fundamentally changes an old paradigm of putting Guard and Reserve in "hand-me down" systems and instead puts them in front line systems with decades of relevancy. In addition to units such as the association at Langley, an important part of our plan is to increase the number of "active associate" units. That is, units in which an Active Duty unit is located at a Guard or Reserve location. The Air Force is highly cognizant of the value our Air Reserve Component bases bring to their surrounding communities, as well as the sensitivities to considerations such as recruiting demographics our Reserve and Guard Components must enjoy in order to be successful. Please know that the FTF effort is mindful of the different cultures that reside across our three.

*Question.* Do you really believe a trained pilot or maintainer would happily take a desk job?

*Answer.* The Future Total Force (FTF) vision does not simply mean taking flying missions away from the Air National Guard without a viable, meaningful mission to replace it. In fact, units of all components of the Air Force face significant change as we work to shape the optimal force to meet future threats.

The FTF will guarantee that both the Air Force Reserve and Air National Guard are full partners as new weapons systems like the F/A-22 and Joint Strike Fighter come on line. In addition, our reserve components will be key players as we adopt emerging technologies to fight the fight of the future, allowing them to be involved in these exciting new missions, yet taking advantage of the "reachback" these missions provide, minimizing the need for disruptive mobilizations.

## SUBCOMMITTEE RECESS

Senator STEVENS. Our next hearing of the Defense Subcommittee will be a closed session to discuss the 2006 budget request for intelligence. That's scheduled for April 13. A classified memo will be available to Senators for review, beginning Monday, April 11. The memo is located in Dirksen, 119. Arrangements can be made for individual Senators to view that memo elsewhere if they contact the staff.

We do appreciate both of you for being here with us today, and your brevity, and wish to thank you, again, for your service, and thank you for, through you, all the men and women who wear your uniform so well.

General JUMPER. Thank you, sir.

Senator STEVENS. Thank you very much.

[Whereupon, at 10:10 a.m., Wednesday, April 6, the subcommittee was recessed, to reconvene subject to the call of the Chair.]